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FILE COVERS 1907 - 27 Mar 2003 VOL 138 ISS 13
FILE LAST UPDATED: 26 Mar 2003 (20030326/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot l119

L119 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:965120 HCAPLUS
DN 138:20904
TI Fungicidal and bactericidal **compositions** for plants containing **phosphonate** and **phosphate** salts, metal chelates, and derivatives thereof
IN **Taylor, John B.**
PA USA
SO U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 702,417.
CODEN: USXXCO
DT Patent
LA English
IC ICM A01N057-00
ICS A01N057-10
NCL 514114000; 514143000
CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
PI	US 2002193351	A1	20021219		US 2001-17687	20011030	<--
	US 5736164	A	19980407		US 1996-705594	19960830	<--
	US 5800837	A	19980901		US 1997-812865	19970306	<--
	AU 9744953	A1	19990412		AU 1997-44953	19970919	<--
	AU 741341	B2	20011129				
	NZ 503394	A	20020301		NZ 1997-503394	19970919	<--
	US 5997910	A	19991207		US 1998-109139	19980702	<--
	US 6139879	A	20001031		US 1999-387100	19990831	<--
	US 6338860	B1	20020115		US 1999-419127	19991015	<--
PRAI	US 1996-705594	A2	19960830	<--			
	US 1997-812865	A3	19970306	<--			
	US 1997-881968	B2	19970625	<--			
	US 1998-109139	A2	19980702	<--			
	US 1999-387100	A2	19990831	<--			
	US 1999-419127	A2	19991015	<--			
	US 2000-702417	A2	20001031				
	WO 1997-US16997	A	19970919	<--			

AB The invention relates to **compns.** contg. at least one metal

Jan Delaval
Reference Librarian
Biotechnology & Chemical Librar
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

chelate, at least one **phosphonate** and at least one **phosphate**. The **compns**. are fungicides and bactericides. The **compns**. are esp. effective against Phytophthora infestans.

ST agrochem fungicide bactericide **phosphonate phosphate** metal chelate

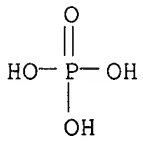
IT Antibacterial agents
Fungicides
(agrochem.; fungicidal and bactericidal **compns**. for plants contg. **phosphonate** and **phosphate** salts, metal chelates, and derivs. thereof)

IT Phytophthora infestans
(control by fungicidal and bactericidal **compns**. for plants contg. **phosphonate** and **phosphate** salts, metal chelates, and derivs. thereof)

IT 1170-02-1, EDDHA 7439-89-6D, Iron, chelates 7439-96-5D, Manganese, chelates 7440-31-5D, Tin, chelates 7440-50-8D, Copper, chelates 7440-66-6D, Zinc, chelates **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 10361-65-6**, Triammonium **phosphate 13446-12-3**, Monoammonium **phosphonate 13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Diammonium **phosphonate** 62534-80-9 94770-71-5, p-EDDHA 94770-71-5D, p-EDDHA, metal chelate 109172-81-8D, EDDHMA, metal chelate 170501-62-9
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(agrochem. fungicidal and bactericidal **compns**. contg.)

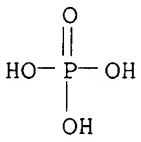
IT **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 10361-65-6**, Triammonium **phosphate 13446-12-3**, Monoammonium **phosphonate 13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Diammonium **phosphonate**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(agrochem. fungicidal and bactericidal **compns**. contg.)

RN 7722-76-1 HCAPLUS
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



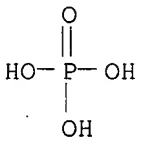
● NH_3

RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



●2 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



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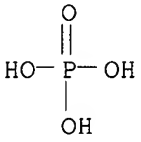
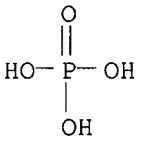
RN 7783-28-0 HCAPLUS
CN Phosphoric acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



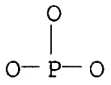
●2 NH_3

RN 10361-65-6 HCAPLUS
CN Phosphoric acid, triammonium salt (8CI, 9CI) (CA INDEX NAME)



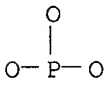
●3 NH_3

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



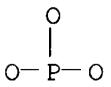
● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



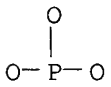
●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 22132-71-4 HCAPLUS
CN Phosphonic acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



●2 NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L119 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:555266 HCAPLUS
DN 137:105158
TI Agrochemical fungicides and bactericides containing **phosphonate** and/or **phosphate** salt, or metal chelates
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2

DT Patent
LA English
IC ICM A01N
CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002056680	A2	20020725	WO 2001-US45376	20011031
	WO 2002056680	A3	20020919		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 9744953	A1	19990412	AU 1997-44953	19970919 <--
	AU 741341	B2	20011129		
	NZ 503394	A	20020301	NZ 1997-503394	19970919 <--
PRAI	US 2000-702417	A	20001031		
	WO 1997-US16997	A	19970919 <--		

OS MARPAT 137:105158

AB The present invention relates to **compns**. contg. at least one metal chelate, at least one **phosphonate** salt, and at least one **phosphate** salt, which are used as fungicides and bactericides. **Phosphate-phosphonate mixts**. are **synergistic**. The prefered chelates are Cu-EDDHA, Cu-pEDDHA, and Cu EDDHMA. The agents are esp. useful for the control of Phytophthora infestans on tomato.

ST fungicide bactericide **phosphonate phosphate** metal chelate

IT Tomato
(Phytophthora control on tomato by **phosphonate** and/or **phosphate** salts, or metal chelates)

IT Antibacterial agents
(agrochem. fungicides and bactericides contg. **phosphonate** and/or **phosphate** salt, or metal chelates)

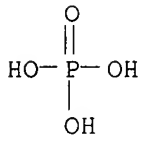
IT Fungicides
(agrochem.; agrochem. fungicides and bactericides contg. **phosphonate** and/or **phosphate** salt, or metal chelates)

IT Phytophthora infestans
(control on tomato by **phosphonate** and/or **phosphate** salts, or metal chelates)

IT **7722-76-1**, Monoammonium **phosphate** **7758-11-4**, Dipotassium **phosphate** **7778-53-2**, Tripotassium **phosphate** **7778-77-0**, Monopotassium **phosphate** **7783-28-0**, Diammonium **phosphate** **10361-65-6**, Triammonium **phosphate** **13446-12-3**, Monoammonium **phosphonate** **13492-26-7**, Dipotassium **phosphonate** **13977-65-6**, Monopotassium **phosphonate** **14265-44-2D**, **Phosphate**, salt **15477-76-6D**, **Phosphonate**, salt **22132-71-4**, Diammonium **phosphonate**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(agrochem. fungicide and bactericide)

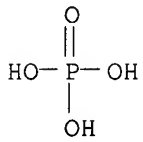
IT 1170-02-1D, EDDHA, metal chelates 7439-89-6D, Iron, chelates 7439-96-5D, Manganese, chelates 7440-31-5D, Tin, chelates 7440-50-8D, Copper, chelates 7440-66-6D, Zinc, chelates 94770-71-5D, metal chelates 109172-81-8D, EDDHMA, metal chelates
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agrochem. fungicides and bactericides)

IT **386229-92-1**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**synergistic** agrochem. fungicide and bactericide)
IT **7722-76-1**, Monoammonium **phosphate** **7758-11-4**, Dipotassium **phosphate** **7778-53-2**, Tripotassium **phosphate** **7778-77-0**, Monopotassium **phosphate** **7783-28-0**, Diammonium **phosphate** **10361-65-6**, Triammonium **phosphate** **13446-12-3**, Monoammonium **phosphonate** **13492-26-7**, Dipotassium **phosphonate** **13977-65-6**, Monopotassium **phosphonate** **14265-44-2D**, **Phosphate**, salt **15477-76-6D**, **Phosphonate**, salt **22132-71-4**, Diammonium **phosphonate**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(agrochem. fungicide and bactericide)
RN 7722-76-1 HCAPLUS
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



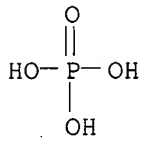
● NH_3

RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



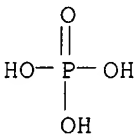
●2 K

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



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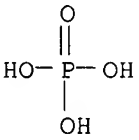
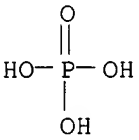
RN 7783-28-0 HCAPLUS
CN Phosphoric acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



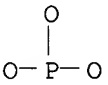
●2 NH_3

RN 10361-65-6 HCAPLUS
CN Phosphoric acid, triammonium salt (8CI, 9CI) (CA INDEX NAME)



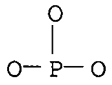
●3 NH_3

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



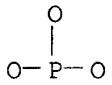
● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



● K

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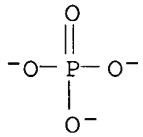
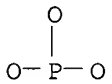
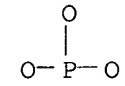


RN 15477-76-6 HCAPLUS
CN Phosphonic acid, ion(2-) (8CI, 9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 22132-71-4 HCAPLUS
CN Phosphonic acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



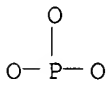
●2 NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
IT **386229-92-1**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**synergistic** agrochem. fungicide and bactericide)

RN 386229-92-1 HCAPLUS
CN Phosphoric acid, dipotassium salt, mixt. with dipotassium phosphonate (9CI) (CA INDEX NAME)

CM 1

CRN 13492-26-7
CMF H3 O3 P . 2 K

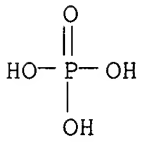


●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

CM 2

CRN 7758-11-4
CMF H3 O4 P . 2 K



●2 K

L119 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:39557 HCAPLUS
DN 136:81312
TI Fungicidal **compositions** for plants against Phytophthora containing **phosphonate** and **phosphate** salts
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO U.S., 8 pp., Cont.-in-part of U.S. 5,997,910.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N059-26
ICS A01N057-00; A01N057-18; A01N057-10
NCL 424601000
CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 6338860	B1	20020115	US 1999-419127	19991015	<--
	US 5736164	A	19980407	US 1996-705594	19960830	<--
	US 5800837	A	19980901	US 1997-812865	19970306	<--
	AU 9744953	A1	19990412	AU 1997-44953	19970919	<--
	AU 741341	B2	20011129			
	NZ 503394	A	20020301	NZ 1997-503394	19970919	<--

US 5997910 A 19991207 US 1998-109139 19980702 <--
WO 2001028335 A1 20010426 WO 2000-US41021 20000928 <--
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1221850 A1 20020717 EP 2000-977279 20000928 <--
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US 2002193351 A1 20021219 US 2001-17687 20011030 <--
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US 1997-812865 A3 19970306 <--
US 1998-109139 A2 19980702 <--
US 1997-881968 B2 19970625 <--
WO 1997-US16997 A 19970919 <--
US 1999-387100 A2 19990831 <--
US 1999-419127 A 19991015 <--
WO 2000-US41021 W 20000928
US 2000-702417 A2 20001031
OS MARPAT 136:81312
AB A **compn.** for preventing and controlling diseases in plants caused by Phytophthora, comprises an effective amt. of at least one first **phosphonate** (PO3) salt [(R1O)P(R2)(:O)(O)]nMen+ and a second **phosphate** (PO4) salt (R1O)P(OR2)(:O)(OH) (R1 = H, K, C1-C4 alkyl, halogen- or nitro-substituted alkyl, alkenyl, halogen-substituted alkenyl, alkynyl, halogen-substituted alkynyl, alkoxy-substituted alkyl, ammonium substituted by alkyl or hydroxy alkyl; R2, R3 = H, K; Me = K, alk. earth metal, Al, NH3; n = 1-3, equal to valence of Me) whereby said effective amts. of said first salt and said second salt, when **combined**, have a **synergistic** effect on said disease prevention and control.
ST **phosphonate phosphate** fungicide **synergistic** Phytophthora
IT Phytophthora infestans
Phytophthora megasperma glycinea
(fungicidal **compns.** for plants a contg. **phosphonate** and **phosphate** salts, against)
IT Fungicides
(**synergistic**; fungicidal **compns.** for plants against Phytophthora contg. **phosphonate** and **phosphate** salts)
IT **7758-11-4D**, Dipotassium **phosphate**, **mixt.** with **phosphonates 7778-53-2D**, Tripotassium **phosphate**, **mixt.** with **phosphonates 7778-77-0D**, Monopotassium **phosphate**, **mixt.** with **phosphonates 13446-12-3D**, Monoammonium **phosphonate**, **mixt.** with **phosphates 13492-26-7D**, Dipotassium **phosphonate**, **mixt.** with **phosphates 13977-65-6D**, Monopotassium **phosphonate**, **mixt.** with **phosphates 22132-71-4D**, Diammonium **phosphonate**, **mixt.** with **phosphates 386229-92-1**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns.** for plants against Phytophthora contg.)
RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Anon; Australasian Plant Pathology P138
(2) Anon; Australasian Plant Pathology P144
(3) Anon; Australasian Plant Pathology P921
(4) Anon; Australasian Plant Pathology 1990, V19(4), P112
(5) Anon; The Merck Index An Encyclopedia of Chemicals, Drugs, and Biologicals Eleventh Edition 1989, P1216
(6) Barlet; US 4935410 A 1990 HCAPLUS
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(8) Barr; US 5133891 A 1992 HCAPLUS
(9) Collins; US 5206228 A 1993 HCAPLUS
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(11) Ducret; US 4139616 A 1979 HCAPLUS
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(16) Greiner; US 5124344 A 1992 HCAPLUS
(17) Greiner; US 5246953 A 1993 HCAPLUS
(18) Greiner; US 5290791 A 1994 HCAPLUS
(19) Greiner; US 5358958 A 1994 HCAPLUS
(20) Hodakowski; US 4780458 A 1988 HCAPLUS
(21) Horriere; US 4698334 A 1987 HCAPLUS
(22) Horriere; US 4806445 A 1989 HCAPLUS
(23) Horriere; US 5169646 A 1992 HCAPLUS
(24) Lacroix; US 4542023 A 1985 HCAPLUS
(25) Lovatt; US 5514200 A 1996 HCAPLUS
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(27) Parham; US 3798020 A 1974 HCAPLUS
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(29) Rippey; US 1935599 A 1933 HCAPLUS
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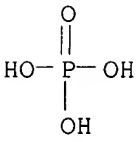
(31) Sheehan; US 5585150 A 1996
(32) Smillie; Disease control and Pest Management 1989, V79(9), P921 HCAPLUS
(33) Soil Bureau; The Use of Red Phosphorus As A Fertilizer 1964, P427
(34) Staub; US 4849219 A 1989 HCAPLUS
(35) Supa Crop; Agrichem Manufacturing Industries Pty, Ltd brochure 1990
(36) Thixy; US 4119724 A 1978 HCAPLUS
(37) Thizy; US 4075324 A 1978 HCAPLUS
(38) Vetanovetz; US 5395418 A 1995 HCAPLUS

IT **7758-11-4D**, Dipotassium **phosphate, mixt.** with **phosphonates 7778-53-2D**, Tripotassium **phosphate, mixt.** with **phosphonates 7778-77-0D**, Monopotassium **phosphate, mixt.** with **phosphonates 13446-12-3D**, Monoammonium **phosphonate, mixt.** with **phosphates 13492-26-7D**, Dipotassium **phosphonate, mixt.** with **phosphates 13977-65-6D**, Monopotassium **phosphonate, mixt.** with **phosphates 22132-71-4D**, Diammonium **phosphonate, mixt.** with **phosphates 386229-92-1**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns.** for plants against Phytophthora contg.)

RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



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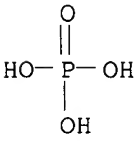
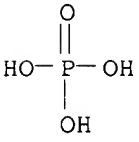
RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



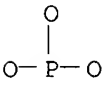
●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



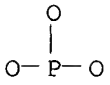
● K

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



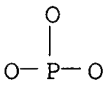
● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



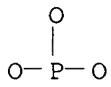
●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 22132-71-4 HCAPLUS
CN Phosphonic acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)

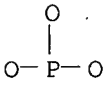


●2 NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 386229-92-1 HCAPLUS
CN Phosphoric acid, dipotassium salt, mixt. with dipotassium phosphonate (9CI) (CA INDEX NAME)

CM 1

CRN 13492-26-7
CMF H3 O3 P . 2 K



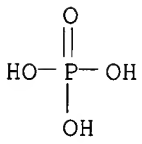
●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

CM 2

CRN 7758-11-4

CMF H3 O4 P . 2 K



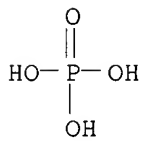
●2 K

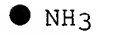
L119 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:300431 HCAPLUS
DN 134:291526
TI Fungicidal **compositions** for plants against Phytophthora containing **phosphonate** and **phosphate** salts, and derivatives thereof
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A01N057-00
ICS A01N057-10; A01N057-18; A01N059-26
CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2001028335	A1	20010426	WO 2000-US41021	20000928	<--
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
	AU 9744953	A1	19990412	AU 1997-44953	19970919	<--
	AU 741341	B2	20011129			
	NZ 503394	A	20020301	NZ 1997-503394	19970919	<--
	US 6338860	B1	20020115	US 1999-419127	19991015	<--
	EP 1221850	A1	20020717	EP 2000-977279	20000928	<--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
	JP 2003511472	T2	20030325	JP 2001-530939	20000928	<--
PRAI	US 1999-419127	A	19991015	<--		
	US 1996-705594	A2	19960830	<--		
	US 1997-812865	A3	19970306	<--		
	WO 1997-US16997	A	19970919	<--		
	US 1998-109139	A2	19980702	<--		
	WO 2000-US41021	W	20000928			

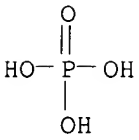
AB A fungicidal **compn.** for plants contg. **phosphonate** (PO3) and **phosphate** (PO4) salts, and derivs. thereof is disclosed. The **compn.** provides a single product which may be employed to control a Phytophthora infestans infection in plants.
ST fungicide **phosphonate phosphate** salt Phytophthora
IT Fungicides

(fungicidal **compns**. for plants against Phytophthora contg. **phosphonate** and **phosphate** salts, and derivs. thereof)
IT Phytophthora infestans
(fungicidal **compns**. for plants contg. **phosphonate** and **phosphate** salts, and derivs. thereof, against)
IT Alkaline earth metals
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**phosphoric** and phosphonic acid derivs. salts; fungicidal **compns**. for plants contg.)
IT **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 13446-12-3**, Phosphonic acid, monoammonium salt **13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Phosphonic acid, Diammonium salt **41607-57-2**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns**. for plants against Phytophthora infestans contg.)
IT 7429-90-5, Aluminum, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**phosphoric** and phosphonic acid derivs. salts; fungicidal **compns**. for plants against Phytophthora infestans contg.)
IT 14798-03-9, Ammonium, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**phosphoric** and phosphonic acid derivs. salts; fungicidal **compns**. for plants contg.)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Taylor; US 5736164 A 1998 HCAPLUS
(2) Taylor; US 5800837 A 1998 HCAPLUS
(3) Taylor; US 5925383 A 1999 HCAPLUS
(4) Taylor; US 5997910 A 1999 HCAPLUS
IT **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 13446-12-3**, Phosphonic acid, monoammonium salt **13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Phosphonic acid, Diammonium salt **41607-57-2**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns**. for plants against Phytophthora infestans contg.)
RN 7722-76-1 HCAPLUS
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



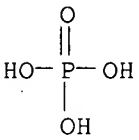


RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



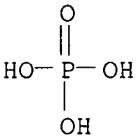
●2 K

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



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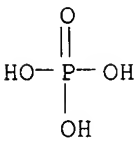
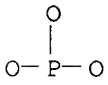
RN 7783-28-0 HCAPLUS
CN Phosphoric acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



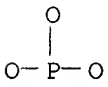
●2 NH_3

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



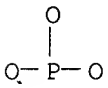
● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



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*** FRAGMENT DIAGRAM IS INCOMPLETE ***
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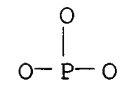
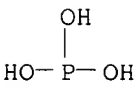


●2 NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 41607-57-2 HCAPLUS
CN Phosphorous acid, tripotassium salt (9CI) (CA INDEX NAME)



●3 K

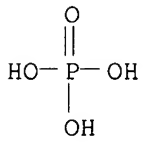
L119 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:300430 HCAPLUS
DN 134:291525
TI Fungicidal **compositions** for plants containing **phosphonate** and **phosphate** salts, and derivatives thereof
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A01N057-00
ICS A01N057-10; A01N057-18; A01N059-26
CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001028334	A1	20010426	WO 2000-US26666	20000928 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

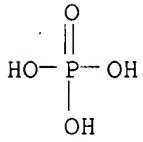
PRAI US 1999-418813 A 19991015 <--
AB A fungicidal **compn.** for controlling fungal diseases in plants contains at least one **phosphonate** and one **phosphate** salts or derivs. thereof in an aq. soln.
ST fungicide **phosphonate phosphate** salt
IT Fungicides
(fungicidal **compns.** for plants contg. **phosphonate** and **phosphate** salts, and derivs. thereof)
IT Alkaline earth metals
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**phosphoric** and phosphonic acid derivs. salts; fungicidal **compns.** for plants contg.)
IT **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 13446-12-3**, Monoammonium **phosphonate 13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Diammonium **phosphonate 41607-57-2**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns.** for plants contg.)
IT 7429-90-5, Aluminum, biological studies 14798-03-9, Ammonium, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)

(**phosphoric** and phosphonic acid derivs. salts; fungicidal **compns**. for plants contg.)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Collins; US 5206228 A 1993 HCAPLUS
(2) Horriere; US 4698334 A 1987 HCAPLUS
(3) Rippey; US 1935599 A 1933 HCAPLUS
(4) Thizy; US 4119724 A 1978 HCAPLUS
IT **7722-76-1**, Monoammonium **phosphate 7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 7783-28-0**, Diammonium **phosphate 13446-12-3**, Monoammonium **phosphonate 13492-26-7**, Dipotassium **phosphonate 13977-65-6**, Monopotassium **phosphonate 22132-71-4**, Diammonium **phosphonate 41607-57-2**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns**. for plants contg.)
RN 7722-76-1 HCAPLUS
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



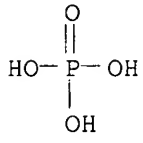
● NH_3

RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



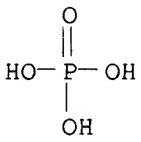
●2 K

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



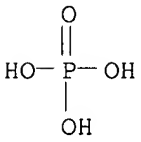
●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



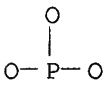
● K

RN 7783-28-0 HCAPLUS
CN Phosphoric acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



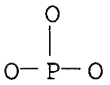
●2 NH_3

RN 13446-12-3 HCAPLUS
CN Phosphonic acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



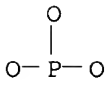
● NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



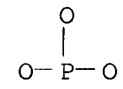
●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



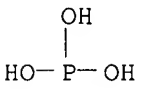
● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 22132-71-4 HCAPLUS
CN Phosphonic acid, diammonium salt (8CI, 9CI) (CA INDEX NAME)



●2 NH_3

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 41607-57-2 HCAPLUS
CN Phosphorous acid, tripotassium salt (9CI) (CA INDEX NAME)



●3 K

L119 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2000:768960 HCAPLUS
DN 133:330908
TI Heavy metal chelates as fungicides and bactericides **compositions** for plants
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO U.S., 11 pp., Cont.-in-part of U.S. Ser. No. 881,968, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N059-20
ICS A01N059-16; A01N031-00; A01N033-00; A01N037-00
NCL 424630000
CC 5-2 (Agrochemical Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6139879	A	20001031	US 1999-387100	19990831
	AU 9744953	A1	19990412	AU 1997-44953	19970919
	AU 741341	B2	20011129		
	NZ 503394	A	20020301	NZ 1997-503394	19970919
	WO 2001015529	A1	20010308	WO 2000-US23706	20000829

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

	US 2002193351	A1	20021219	US 2001-17687	20011030
PRAI	US 1997-881968	B2	19970625		
	US 1996-705594	A2	19960830		
	US 1997-812865	A3	19970306		
	WO 1997-US16997	A	19970919		
	US 1998-109139	A2	19980702		
	US 1999-387100	A	19990831		
	US 1999-419127	A2	19991015		
	US 2000-702417	A2	20001031		

AB The invention relates to heavy metal chelates, which are used as agrochem. fungicides and bactericides. In particular, the invention relates to Cu complex of EDDHA.

ST heavy metal chelate agrochem fungicide bactericide

IT Antibacterial agents
Fungicides
(agrochem.; heavy metal chelates)

IT Heavy metals
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(chelates; agrochem. fungicides and bactericides)

IT Chelates
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(heavy metal; agrochem. fungicides and bactericides)

IT 19441-99-7 62534-80-9 72901-53-2 80967-87-9
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agrochem. fungicide and bactericide)

IT 1170-02-1D, EDDHA, chelates with heavy metals 7439-96-5D, Manganese, chelates, biological studies 7440-31-5D, Tin, chelates, biological studies 7440-50-8D, Copper, chelates, biological studies 7440-66-6D, Zinc, chelates, biological studies 94770-71-5D, p-EDDHA, chelates with heavy metals 109172-81-8D, EDDHMA, chelates with heavy metals
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agrochem. fungicides and bactericides)

RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(2) Albrecht; US 4041164 1977 HCAPLUS
(3) Anon; WO 9308971 1993 HCAPLUS
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(5) D'Amico; US 3852444 1974 HCAPLUS
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(11) Krajncic; J Plant Physiol 1995, V147(3/4), P397 HCAPLUS
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(15) Nabhan; Plant Soil 1977, V46(3), P603 HCAPLUS
(16) Ramani; J Plant Nutr 1985, V8(12), P1183 HCAPLUS
(17) Ramani; J Plant Nutr 1985, V8(12), P1199 HCAPLUS
(18) Ramani; J Plant Physiol 1985, V121(4), P313 HCAPLUS
(19) Scher; US 4714614 1987 HCAPLUS
(20) Skrzypczak; Phytopathol Polonica 1996, V11, P41

L119 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 2000:227440 HCAPLUS
DN 132:261672
TI Weed growth-inhibiting **formulations** containing nonselective organophosphorus herbicides
IN Horibe, Yoshimichi; Amagasa, Tadashi; Sato, Kazuo; Aoki, Atsushi
PA Sankyo Company, Limited, Japan
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
IC ICM A01N057-20
ICS A01N057-12; A01N063-02; A01N059-06; A01N025-00
CC 5-3 (**Agrochemical** Bioregulators)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000018236	A1	20000406	WO 1999-JP5174	19990922 <--
	W: AU, BR, CA, CN, KR, RU, UA, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9957577	A1	20000417	AU 1999-57577	19990922 <--
	JP 2000159615	A2	20000613	JP 1999-267910	19990922 <--
PRAI	JP 1998-271696	A	19980925 <--		
	WO 1999-JP5174	W	19990922 <--		

OS MARPAT 132:261672
AB Agrochem. **compns**. that can be utilized to control the growth of weeds without killing the plants (e.g. on slopes or ridges) contain a first ingredient selected from the group consisting of glyphosate, etc.; a second ingredient selected from the group consisting of phosphorous acid derivs., etc.; and a third ingredient selected from the group consisting of antioxidants, etc. Thus, glyphosate isopropylamine salt 1000 + calcium propionate 500 + Pr gallate 1000 ppm controlled the height of gramineous weeds such as Setaria viridis and broadleaf weeds (e.g. Ipomoea purpurea).
ST weed growth inhibitor organophosphorus herbicide **formulation**
IT Surfactants
(anionic; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)
IT Tannins
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(antioxidant; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)
IT Weed control
(**formulations** contg. nonselective organophosphorus herbicides for controlling weed growth)
IT Hormones, plant
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(growth inhibitors; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)
IT Amines, biological studies
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(hindered, photostabilizers; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)
IT Alums
Borates
Carbonates, biological studies
Chlorates
Cyanates

Hydrogen halides
Nitrates, biological studies
Nitrites
Peroxysulfates
Phosphates, biological studies
Salts, biological studies
Sulfates, biological studies
Sulfites
Thiosulfates
RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(mixts.; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT Herbicides
(organophosphorus; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT Antioxidants
(phenolic; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT Amino acids, biological studies
Carboxylic acids, biological studies
RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(salts, mixts. with organophosphorus herbicides; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT Agrochemical **formulations**
Antioxidants
Light stabilizers
Surfactants
(weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 121-79-9, Propyl gallate
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(antioxidant; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 52829-07-9, Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(photostabilizer; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 9069-80-1, Formaldehyde-naphthalenesulfonic acid polymer ammonium salt
9084-06-4, Naphthalenesulfonic acid-formaldehyde polymer sodium salt
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(surfactant; weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 207670-92-6
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 50-00-0D, Formaldehyde, salts, mixts., biological studies 50-21-5D, Lactic acid, salts, mixts. with organophosphorus herbicides 50-81-7D, L-Ascorbic acid, salts, mixts. with organophosphorus herbicides, biological studies 52-90-4D, Cysteine, salts, mixts. with organophosphorus herbicides 56-12-2D, GABA, salts, mixts. with organophosphorus herbicides 56-40-6D, Glycine, salts, mixts. with organophosphorus herbicides, biological studies 56-41-7D, Alanine, salts, mixts. with organophosphorus herbicides 56-45-1D, Serine, salts, mixts. with organophosphorus herbicides 56-84-8D, Aspartic acid, salts, mixts. with organophosphorus herbicides 56-85-9D, Glutamine, salts,

mixts. with organophosphorus herbicides 56-86-0D, Glutamic acid, salts, mixts. with organophosphorus herbicides 56-87-1D, Lysine, salts, mixts. with organophosphorus herbicides 56-89-3D, Cystine, salts, mixts. with organophosphorus herbicides 60-18-4D, Tyrosine, salts, mixts. with organophosphorus herbicides 61-90-5D, Leucine, salts, mixts. with organophosphorus herbicides 63-68-3D, Methionine, salts, mixts. with organophosphorus herbicides 63-91-2D, Phenylalanine, salts, mixts. with organophosphorus herbicides 64-18-6D, Formic acid, salts, mixts. with organophosphorus herbicides, biological studies 64-19-7D, Acetic acid, salts, mixts. with organophosphorus herbicides, biological studies 70-26-8D, Ornithine, salts, mixts. with organophosphorus herbicides 70-47-3D, Asparagine, salts, mixts. with organophosphorus herbicides 71-00-1D, Histidine, salts, mixts. with organophosphorus herbicides 72-18-4D, Valine, salts, mixts. with organophosphorus herbicides 72-19-5D, Threonine, salts, mixts. with organophosphorus herbicides 73-22-3D, Tryptophan, salts, mixts. with organophosphorus herbicides 73-32-5D, Isoleucine, salts, mixts. with organophosphorus herbicides 74-79-3D, Arginine, salts, mixts. with organophosphorus herbicides 79-09-4D, Propionic acid, salts, mixts. with organophosphorus herbicides 87-69-4D, Tartaric acid, salts, mixts. with organophosphorus herbicides, biological studies 89-00-9D, Quinolinic acid, salts, mixts. 97-65-4D, Itaconic acid, salts, mixts. with organophosphorus herbicides 98-98-6D, Picolinic acid, salts, mixts. 99-50-3D, Protocatechuic acid, salts, mixts. with organophosphorus herbicides 99-96-7D, 4-Hydroxybenzoic acid, salts, mixts. with organophosphorus herbicides 103-82-2D, Phenylacetic acid, salts, mixts. with organophosphorus herbicides 107-95-9D, .beta.-Alanine, salts, mixts. with organophosphorus herbicides 109-52-4D, Valeric acid, salts, mixts. with organophosphorus herbicides 110-15-6D, Succinic acid, salts, mixts. with organophosphorus herbicides 110-17-8D, Fumaric acid, salts, mixts. with organophosphorus herbicides 118-92-3D, Anthranilic acid, salts, mixts. with organophosphorus herbicides 123-76-2D, Levulinic acid, salts, mixts. with organophosphorus herbicides 127-17-3D, Pyruvic acid, salts, mixts. with organophosphorus herbicides 138-59-0D, Shikimic acid, salts, mixts. with organophosphorus herbicides 139-12-8D, Aluminum acetate, mixts. 141-82-2D, Malonic acid, salts, mixts. with organophosphorus herbicides 143-07-7D, Lauric acid, salts, mixts. with organophosphorus herbicides 144-62-7D, Oxalic acid, salts, mixts. with organophosphorus herbicides 147-85-3D, Proline, salts, mixts. with organophosphorus herbicides 156-06-9D, Phenylpyruvic acid, salts, mixts. with organophosphorus herbicides 156-38-7D, p-Hydroxyphenylacetic acid, salts, mixts. with organophosphorus herbicides 298-12-4D, ..alpha..-Ketoacetic acid, salts, mixts. with organophosphorus herbicides 299-28-5D, Calcium gluconate, mixts. 328-50-7D, 2-Oxoglutaric acid, salts, mixts. with organophosphorus herbicides 372-75-8D, Citrulline, salts, mixts. with organophosphorus herbicides 451-13-8D, Homogentisic acid, salts, mixts. with organophosphorus herbicides 471-34-1D, Calcium carbonate, mixts. 473-81-4D, Glyceric acid, salts, mixts. with organophosphorus herbicides 490-79-9D, Gentisic acid, salts, mixts. with organophosphorus herbicides 501-52-0D, Benzenepropanoic acid, salts, mixts. with organophosphorus herbicides 506-85-4D, Fulminic acid, salts, mixts. 512-25-4D, Barium citrate, mixts. with organophosphorus herbicides 526-95-4D, Gluconic acid, salts, mixts. with organophosphorus herbicides 535-75-1D, Pipecolic acid, salts, mixts. 541-50-4D, Acetoacetic acid, salts, mixts. with organophosphorus herbicides 542-32-5D, ..alpha..-Aminoadipic acid, salts, mixts. with organophosphorus herbicides 542-78-9D, Malonaldehyde, salts, mixts. with organophosphorus herbicides 546-93-0D, Magnesium carbonate, mixts. 552-63-6D, Tropic acid, salts, mixts. with organophosphorus herbicides 567-36-2D, 3-Hydroxyproline, salts, mixts. with organophosphorus herbicides 591-64-0D, Calcium levulinate, mixts. 672-15-1D, Homoserine, salts, mixts. with organophosphorus herbicides 759-05-7D, 2-Oxoisovaleric acid, salts, mixts. with organophosphorus herbicides 814-80-2D, Calcium lactate, mixts. 816-66-0D,

2-Oxoisocaproic acid, salts, mixts. with organophosphorus herbicides 824-35-1D, Calcium salicylate, mixts. with organophosphorus herbicides, mixts. 1071-83-6D, Glyphosate, mixts. contg. herbicide and its salts 1113-60-6D, Hydroxypyruvic acid, salts, mixts. with organophosphorus herbicides 1305-62-0D, Calcium hydroxide, mixts. with organophosphorus herbicides 1309-42-8D, Magnesium hydroxide, mixts. with organophosphorus herbicides 1460-34-0D, 2-Oxo-3-methylvaleric acid, salts, mixts. with organophosphorus herbicides 2090-05-3D, Calcium benzoate, mixts. 2414-98-4D, Magnesium ethoxide, mixts. with organophosphorus herbicides 2439-99-8D, Glyphosine, mixts. contg. herbicide and its salts 2466-09-3D, Diphosphoric acid, salts, mixts. 3164-34-9D, Calcium tartrate, mixts., biological studies 3184-35-8D, .alpha.-Ketoadipic acid, salts, mixts. with organophosphorus herbicides 3486-35-9D, Zinc carbonate, mixts. 3909-12-4D, Threonic acid, salts, mixts. with organophosphorus herbicides 4075-81-4D, Calcium propionate, mixts. 6303-21-5D, Phosphinic acid, salts, mixts. 6556-12-3D, Glucuronic acid, salts, mixts. with organophosphorus herbicides 6667-60-3D, .beta.-Methylaspartic acid, salts, mixts. with organophosphorus herbicides 6915-15-7D, Malic acid, salts, mixts. with organophosphorus herbicides 7230-93-5D, Aluminum laurate, mixts. 7429-90-5D, Aluminum, salts, mixts. with organophosphorus herbicides, biological studies 7439-89-6D, Iron, salts, mixts. with organophosphorus herbicides, biological studies 7439-95-4D, Magnesium, salts, mixts. with organophosphorus herbicides, biological studies 7440-39-3D, Barium, salts, mixts. with organophosphorus herbicides, biological studies 7440-66-6D, Zinc, salts, mixts. with organophosphorus herbicides, biological studies 7440-70-2D, Calcium, salts, mixts. with organophosphorus herbicides, biological studies 7446-70-0D, Aluminum chloride, mixts. 7487-88-9D, Magnesium sulfate, mixts. 7646-85-7D, Zinc chloride, mixts. 7693-13-2D, Calcium citrate, mixts. with organophosphorus herbicides 7705-08-0D, Iron(III) chloride, mixts. 7720-78-7D, Ferrous sulfate, mixts. 7733-02-0D, Zinc sulfate, mixts. **7757-93-9D**, Calcium hydrogen **phosphate**, mixts. 7758-94-3D, Iron(II) chloride, mixts. 7778-18-9D, Calcium sulfate, mixts. 7779-25-1D, Magnesium citrate, mixts. with organophosphorus herbicides 7779-88-6D, Zinc nitrate, mixts. 7779-90-0D, Zinc **phosphate**, mixts. 7784-25-0D, Ammonium aluminum sulfate, mixts. with organophosphorus herbicides 7786-30-3D, Magnesium chloride, mixts. 7789-79-9D, Phosphinic acid, calcium salt, mixts. 9005-32-7D, Alginic acid, salts, mixts. with organophosphorus herbicides 9012-76-4D, Chitosan, mixts. with organophosphorus herbicides 10028-22-5D, Ferric sulfate, mixts. 10043-01-3D, Aluminum sulfate, mixts. 10043-01-3D, Alum, mixts. with organophosphorus herbicides 10043-52-4D, Calcium chloride, mixts. 10124-37-5D, Calcium nitrate, mixts. 10257-55-3D, Calcium sulfite, mixts. 10377-60-3D, Magnesium nitrate, mixts. 10402-24-1D, Iron **phosphate**, mixts. 11113-66-9D, Iron hydroxide, mixts. with organophosphorus herbicides 13473-90-0D, Aluminum nitrate, mixts. **13598-36-2D**, Phosphonic acid, esters, salts, mixts. with organophosphorus herbicides 14104-77-9D, Iron nitrate, mixts. 14455-29-9D, Aluminum carbonate, mixts. 14866-19-4D, Calcium dihydrogen pyrophosphate, mixts. 15007-61-1D, Potassium aluminum sulfate, mixts. with organophosphorus herbicides **15099-32-8D**, Phosphonic acid, aluminum salt, mixts. 15479-57-9D, Aluminum salicylate, mixts. with organophosphorus herbicides 17194-00-2D, Barium hydroxide, mixts. with organophosphorus herbicides 18917-91-4D, Aluminum lactate, mixts. 18917-93-6D, Magnesium lactate, mixts. 20196-46-7D, Sulfoxylic acid, salts, mixts. 20246-53-1D, Gulonic acid, salts, mixts. with organophosphorus herbicides 20427-58-1D, Zinc hydroxide, mixts. with organophosphorus herbicides 21645-51-2D, Aluminum hydroxide, mixts. with organophosphorus herbicides **25493-06-5D**, Phosphonic acid, calcium salt, mixts. 30581-89-6D, Imidazoleacetic acid, salts, mixts. with organophosphorus herbicides 31142-56-0D, Aluminum citrate, mixts. with organophosphorus herbicides 32378-14-6D, mixts. 33239-40-6D, ..alpha..-Ketosuccinamic acid, salts,

mixts. with organophosphorus herbicides 34296-08-7D, Barium isopropyl **phosphate**, mixts. with organophosphorus herbicides 35597-43-4D, Bialaphos, mixts. contg. herbicide and its salts 36413-60-2D, Quinic acid, mixts. with organophosphorus herbicides 39148-24-8D, Fosetyl Al, mixts. 51276-47-2D, Glufosinate, mixts. contg. herbicide and its salts 53500-11-1D, mixts. with organophosphorus herbicides 61114-26-9D, mixts. with organophosphorus herbicides 65644-56-6D, Calcium glycerate, mixts. 77760-97-5D, Aluminum acetoacetate, mixts. with organophosphorus herbicides 106145-21-5D, mixts. 130752-20-4D, mixts. 207671-14-5D, mixts. with organophosphorus herbicides 207671-76-9D, mixts. with organophosphorus herbicides 207671-77-0D, mixts. with organophosphorus herbicides
RL: **AGR (Agricultural use)**; BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

IT 100-42-5D, Styrene, sulfonated, sodium salts 8061-51-6, Sodium ligninsulfonate 9038-56-6, Styrene-sodium maleate copolymer 37307-94-1, Formaldehyde-phenolsulfonic acid polymer, sodium salt
RL: AGR (Agricultural use); BUU (Biological use, unclassified); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

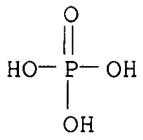
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Monsanto Company; JP 06256121 A HCAPLUS
(2) Monsanto Company; CA 2101669 A1 HCAPLUS
(3) Monsanto Company; NZ 248289 A
(4) Monsanto Company; US 5612285 A HCAPLUS
(5) Monsanto Company; US 5693593 A HCAPLUS
(6) Monsanto Company; AU 668190 B HCAPLUS
(7) Monsanto Company; EP 582561 A1 1994 HCAPLUS
(8) Safer Inc; JP 06501484 A
(9) Safer Inc; CA 2095341 C HCAPLUS
(10) Safer Inc; NZ 240435 A
(11) Safer Inc; EP 556283 A1 HCAPLUS
(12) Safer Inc; AU 648622 B HCAPLUS
(13) Safer Inc; WO 9207467 A1 1992 HCAPLUS
(14) Sankyo Company Limited; JP 10273406 A HCAPLUS
(15) Sankyo Company Limited; JP 10273407 A HCAPLUS
(16) Sankyo Company Limited; EP 945065 A1 HCAPLUS
(17) Sankyo Company Limited; WO 9819544 A1 1998 HCAPLUS
(18) Sumitomo Chemical Company Limited; JP 01157096 A 1989

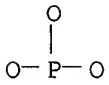
IT **7757-93-9D**, Calcium hydrogen **phosphate**, mixts. **13598-36-2D**, Phosphonic acid, esters, salts, mixts. with organophosphorus herbicides **15099-32-8D**, Phosphonic acid, aluminum salt, mixts. **25493-06-5D**, Phosphonic acid, calcium salt, mixts.
RL: **AGR (Agricultural use)**; BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(weed growth-inhibiting **formulations** contg. nonselective organophosphorus herbicides)

RN 7757-93-9 HCAPLUS
CN Phosphoric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)

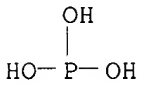


● Ca

RN 13598-36-2 HCAPLUS
CN Phosphonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

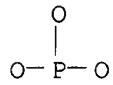


*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 15099-32-8 HCAPLUS
CN Phosphorous acid, aluminum salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Al

RN 25493-06-5 HCAPLUS
CN Phosphonic acid, calcium salt (8CI, 9CI) (CA INDEX NAME)



●x Ca

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L119 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:772517 HCAPLUS
DN 132:9946
TI Agrochemical **compositions** containing N-(phosphonomethyl)glycine and metal salts and their use as plant growth-suppressing agents
IN Amagasa, Tadashi; Horibe, Yoshimichi
PA Sankyo Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A01N057-20
ICS A01N025-32; A01N037-42; A01N043-40; A01N043-58; A01N043-653;

A01N043-70; A01N047-02; A01N047-04; A01N047-06; A01N033-12; A01N043-08; A01N043-50; A01N043-54

CC 5-3 (**Agrochemical** Bioregulators)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11335214	A2	19991207	JP 1998-139554	19980521 <--
PRAI	JP 1998-139554		19980521 <--		

AB The **compns**. contain N-(phosphonomethyl)glycine (I) and/or its salts, (1) .gtoreq.1 selected from Ca, Mg, Al, Ba, Fe, and Zn salts of H2CO3, hydrohalogenic acids, and B, N, P, or S-contg. inorg. acids [except Al(NO3)3 and CaHPO3], hydroxides of Ca, Mg, Al, Ba, Fe, and Zn, alum [except NH4Al(SO4)2 and KAl(SO4)2], pseudo-alum, Ca, Mg, Al, Ba, Fe, and Zn salts of C2-12 amino acids, Ca, Mg, Al, Ba, Fe, and Zn salts of C2-30 (un)satd. chain monocarboxylic acids (except HCO2H, AcOH, propionic acid, lactic acid, levulinic acid, and ascorbic acid) which may be substituted with 1-5 OH, CHO, oxo, Ph having optional 1-3 OH, 5-membered heterocyclyl, Ca, Mg, Al, Ba, Fe, and Zn salts of C2-30 (un)satd. dicarboxylic acids (except alginic acid) which may be substituted with 1-5 substituents given above, Ca, Mg, Al, Ba, Fe, and Zn salts of C5-6 cycloalkanecarboxylic acids which may be substituted with 1-4 OH, Ca, Mg, Al, Ba, Fe, and Zn salts of glyoxylic acid, Ca, Mg, Al, Ba, Fe, and Zn salts of benzoic acid substituted with 1-3 OH or NH2 (except salicylic acid), and Ca, Mg, Al, Ba, Fe, and Zn salts of 5-6-membered mono- or dicarboxylic acids which may be substituted with 1-3 lower alkyl and/or OH, and optionally (2) .gtoreq.1 selected from plant growth regulators, microbicides (ergosterol biosynthesis inhibitors), mefluidide, atrazine, pyridate, and clopyralid. The **compns**. show no herbicidal action and only suppress growth of plant, and are applied to slope and levee to prevent excess erosion of soil. Application of a spray contg. 1000 ppm I isopropylamine salt (II) and 152 ppm (as Al) Al laurate to Sorghum halepense, Lolium multiflorum, Poa annua, etc., suppressed length of the aerial parts at 90-99% suppression rate, while application of II alone completely killed the weeds. Agrochem. **formulations** were also given.

ST weed growth suppressing agent glyphosate combination metal salt; aluminum laurate glyphosate weed growth suppressing agent

IT Herbicides
Weed control
(weed growth-suppressing agents contg. glyphosate and salts of Ca, Mg, Al, Ba, Fe, or Zn)

IT 57-87-4, Ergosterol
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(biosynthesis inhibitors, microbicides; weed growth-suppressing agents contg. glyphosate and salts of Ca, Mg, Al, Ba, Fe, or Zn)

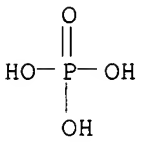
IT 123-33-1, Maleic hydrazide 28382-15-2, Maleic hydrazide potassium salt
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(weed growth-suppressing agents contg. glyphosate and salts of Ca, Mg, Al, Ba, Fe, or Zn)

IT 299-28-5, Calcium gluconate 471-34-1, Calcium carbonate, biological studies 546-93-0, Magnesium carbonate 1071-83-6, Glyphosate 1702-17-6, Clopyralid 1912-24-9, Atrazine 3164-34-9, Calcium tartrate, biological studies 3486-35-9, Zinc carbonate 7230-93-5, Aluminum laurate 7446-70-0, Aluminum chloride, biological studies 7487-88-9, Magnesium sulfate, biological studies 7646-85-7, Zinc chloride, biological studies 7720-78-7, Ferrous sulfate 7733-02-0, Zinc sulfate **7757-93-9**, Calcium hydrogen **phosphate 7758-23-8**, Calcium bis(dihydrogen **phosphate**) 7758-94-3, Ferrous chloride 7778-18-9, Calcium sulfate 7779-88-6, Zinc nitrate 7779-90-0, Zinc **phosphate** 7786-30-3, Magnesium chloride, biological studies 10028-22-5, Ferric sulfate 10043-01-3, Aluminum sulfate 10043-52-4, Calcium chloride, biological studies 10124-37-5, Calcium nitrate 10257-55-3, Calcium sulfite 10377-60-3, Magnesium nitrate 10402-24-1, Iron **phosphate** 10421-48-4, Ferric

nitrate 13718-65-5, Iron potassium alum 14104-77-9, Iron nitrate 14455-29-9, Aluminum carbonate 14866-19-4, Calcium dihydrogen pyrophosphate **15099-32-8**, Aluminum phosphite **21056-98-4** 21293-29-8, Abscisic acid 32378-14-6 38641-94-0, Glyphosate isopropylamine salt 53780-34-0, Mefluidide 55512-33-9, Pyridate 56425-91-3, Flurprimidol 65644-56-6, Calcium glycerate 76738-62-0, Paclobutrazol 95266-40-3, Trinexapac-ethyl 127277-53-6, Prohexadione calcium 130183-88-9 130752-20-4
RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(weed growth-suppressing agents contg. glyphosate and salts of Ca, Mg, Al, Ba, Fe, or Zn)

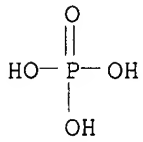
IT **7757-93-9**, Calcium hydrogen **phosphate 7758-23-8**, Calcium bis(dihydrogen **phosphate**) **15099-32-8**, Aluminum phosphite **21056-98-4**
RL: **AGR (Agricultural use)**; BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(weed growth-suppressing agents contg. glyphosate and salts of Ca, Mg, Al, Ba, Fe, or Zn)

RN 7757-93-9 HCAPLUS
CN Phosphoric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



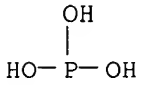
● Ca

RN 7758-23-8 HCAPLUS
CN Phosphoric acid, calcium salt (2:1) (8CI, 9CI) (CA INDEX NAME)



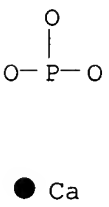
●1/2 Ca

RN 15099-32-8 HCAPLUS
CN Phosphorous acid, aluminum salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Al

RN 21056-98-4 HCAPLUS
CN Phosphonic acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L119 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:582917 HCAPLUS
DN 129:202483
TI Plant fertilizer **compositions** containing **phosphonate** and **phosphate** salts and derivatives thereof
IN **Taylor, John B.**
PA **Foliar Nutrients, Inc., USA**
SO U.S., 6 pp., Cont.-in-part of U. S. 5,736,164.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N059-26
ICS C05B007-00; C05G003-00; C05G003-02
NCL 424601000
CC 19-6 (**Fertilizers**, Soils, and Plant Nutrition)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 5800837	A	19980901	US 1997-812865	19970306	<--
	US 5736164	A	19980407	US 1996-705594	19960830	<--
	AU 9744953	A1	19990412	AU 1997-44953	19970919	<--
	AU 741341	B2	20011129			
	NZ 503394	A	20020301	NZ 1997-503394	19970919	<--
	WO 9838863	A1	19980911	WO 1998-US3459	19980224	<--
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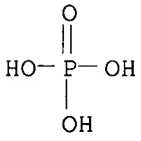
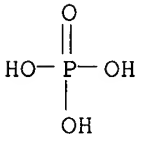
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
	AU 9861809	A1	19980922	AU 1998-61809	19980224	<--
	AU 749891	B2	20020704			
	US 5997910	A	19991207	US 1998-109139	19980702	<--
	US 6338860	B1	20020115	US 1999-419127	19991015	<--
	US 2002048609	A1	20020425	US 2001-954926	20010918	<--
	US 6509041	B2	20030121			
	US 2002193351	A1	20021219	US 2001-17687	20011030	<--
PRAI	US 1996-705594	A2	19960830	<--		
	US 1997-812865	A	19970306	<--		
	US 1997-881968	B2	19970625	<--		
	WO 1997-US16997	A	19970919	<--		
	WO 1998-US3459	W	19980224	<--		
	US 1998-109139	A2	19980702	<--		
	US 1999-387100	A2	19990831	<--		
	US 1999-419127	A3	19991015	<--		

US 2000-702417 A2 20001031
AB The **compn**. provides a single product which may be employed to stimulate the growth response in plants. Application of the **compn**. eliminates the pathol. acerbation of Ascomycete, caused by **phosphonates** applied by themselves.
ST fertilizer **compn phosphonate phosphate**
IT **Fertilizers**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(fertilizer **compns**. contg. **phosphonate** and **phosphate** salts)
IT **7664-38-2D**, **Phosphoric** acid, salts, biological studies **7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 13492-26-7**, DiPotassium **phosphonate 13598-36-2D**, Phosphonic acid, salts **13977-65-6**, MonoPotassium **phosphonate 17466-29-4**, Phosphonic acid, potassium salt
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fertilizer **compns**. contg. **phosphonate** and **phosphate** salts)
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Barlet; US 4935410 1990 HCAPLUS
(2) Barlet; US 5070083 1991 HCAPLUS
(3) Barr; US 5133891 1992 HCAPLUS
(4) Collins; US 5206228 1993 HCAPLUS
(5) Corbet; US 4755614 1988 HCAPLUS
(6) Ducret; US 4139616 1979 HCAPLUS
(7) Dunhill, R; Australasian Plant Pathology 1990, V19(4), P138
(8) Fred, A; Transition of Phosphite to Phosphate in Soils 1952, P361
(9) George, M; Journal of Bacteriology 1966, P578
(10) Grant, B; The Australasian Plant Pathology 1990, V19(4), P115
(11) Greiner; US 5124344 1992 HCAPLUS
(12) Greiner; US 5246953 1993 HCAPLUS
(13) Greiner; US 5290791 1994 HCAPLUS
(14) Greiner; US 5358958 1994 HCAPLUS
(15) Guest, D; Australasian Plant Pathology 1990, V19(4), P113
(16) Hodakowski; US 4780458 1988 HCAPLUS
(17) Horriere; US 4698334 1987 HCAPLUS
(18) Horriere; US 4806445 1989 HCAPLUS
(19) Horriere; US 5169646 1992 HCAPLUS
(20) Lacroix; US 4542023 1985 HCAPLUS
(21) Lovatt; US 5514200 1996 HCAPLUS
(22) Parham; US 3798020 1974 HCAPLUS
(23) Pepin; US 5342835 1994 HCAPLUS
(24) Rippey; US 1935599 1933 HCAPLUS
(25) Robertson, H; Archives of Biochemistry and Biophysics, The Merck Index, 11th Edition 1989, P380
(26) Staub; US 4849219 1989 HCAPLUS
(27) Thizy; US 4075324 1978 HCAPLUS
(28) Thizy; US 4119724 1978 HCAPLUS
(29) Vetanovetz; US 5395418 1995 HCAPLUS
(30) Widdowson, P; New Zealand Journal of Science 1964, P427
IT **7664-38-2D**, **Phosphoric** acid, salts, biological studies **7758-11-4**, Dipotassium **phosphate 7778-53-2**, Tripotassium **phosphate 7778-77-0**, Monopotassium **phosphate 13492-26-7**, DiPotassium **phosphonate 13598-36-2D**, Phosphonic acid, salts **13977-65-6**, MonoPotassium **phosphonate 17466-29-4**, Phosphonic acid, potassium salt
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fertilizer **compns**. contg. **phosphonate** and **phosphate** salts)

RN 7664-38-2 HCAPLUS
CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)

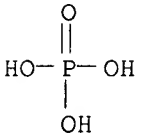


RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



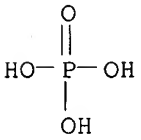
●2 K

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



● K

RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)

●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13598-36-2 HCAPLUS
CN Phosphonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)

● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 17466-29-4 HCAPLUS
CN Phosphonic acid, potassium salt (8CI, 9CI) (CA INDEX NAME)

●x K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

L119 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN 1998:214296 HCAPLUS
DN 128:254062
TI Fungicidal **compositions** for plants containing **phosphonate** and **phosphate** salts
IN **Taylor, John B.**
PA USA
SO U.S., 6 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM A01N059-26
NCL 424601000

CC 5-2 (**Agrochemical** Bioregulators)
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5736164	A	19980407	US 1996-705594	19960830 <--
	US 5800837	A	19980901	US 1997-812865	19970306 <--
	WO 9915017	A1	19990401	WO 1997-US16997	19970919 <--
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	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9744953	A1	19990412	AU 1997-44953	19970919 <--
	AU 741341	B2	20011129		
	NZ 503394	A	20020301	NZ 1997-503394	19970919 <--
	US 5925383	A	19990720	US 1997-943002	19971002 <--
	US 5997910	A	19991207	US 1998-109139	19980702 <--
	US 6338860	B1	20020115	US 1999-419127	19991015 <--
	US 2002048609	A1	20020425	US 2001-954926	20010918 <--
	US 6509041	B2	20030121		
	US 2002193351	A1	20021219	US 2001-17687	20011030 <--
PRAI	US 1996-705594	A2	19960830 <--		
	US 1997-812865	A3	19970306 <--		
	US 1997-881968	B2	19970625 <--		
	WO 1997-US16997	A	19970919 <--		
	US 1998-109139	A2	19980702 <--		
	US 1999-387100	A2	19990831 <--		
	US 1999-419127	A3	19991015 <--		
	US 2000-702417	A2	20001031		

AB The title **compn**. provides a single product which may be employed to control parasitic fungi in plants. It eliminates the **phosphonate**-induced pathol. acerbation of Ascomycete fungal infections. The **compn**. comprises K2HPO4, KH2PO4 or K3PO4 in **combination** with K2HPO3, KH2PO3 or K3PO3.

ST fungicide potassium **phosphonate phosphate**

IT Fungicides
(agrochem.; **compn**. contg. potassium **phosphonate** and **phosphate**)

IT **205241-87-8**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(fungicidal **compn**. for plants)

IT **7758-11-4D**, Dipotassium **phosphate, mixts**. with potassium **phosphonates 7778-53-2D**, Tripotassium **phosphate, mixts**. with potassium **phosphonates 7778-77-0D**, Monopotassium **phosphate, mixts**. with potassium **phosphonates 13492-26-7D**, Dipotassium **phosphonate, mixts**. with potassium **phosphates 13977-65-6D**, Monopotassium **phosphonate, mixts**. with potassium **phosphates 41607-57-2D, mixts** . with potassium **phosphates**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns**. for plants)

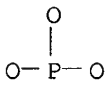
IT **205241-87-8**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(fungicidal **compn**. for plants)

RN 205241-87-8 HCAPLUS

CN Phosphoric acid, dipotassium salt, mixt. with potassium hydrogen phosphonate (9CI) (CA INDEX NAME)

CM 1

CRN 13977-65-6
CMF H3 O3 P . K

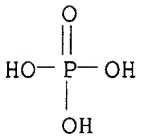


● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***

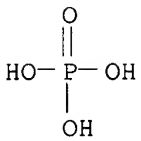
CM 2

CRN 7758-11-4
CMF H3 O4 P . 2 K



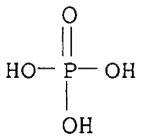
●2 K

IT **7758-11-4D**, Dipotassium **phosphate, mixts.** with potassium **phosphonates 7778-53-2D**, Tripotassium **phosphate, mixts.** with potassium **phosphonates 7778-77-0D**, Monopotassium **phosphate, mixts.** with potassium **phosphonates 13492-26-7D**, Dipotassium **phosphonate, mixts.** with potassium **phosphates 13977-65-6D**, Monopotassium **phosphonate, mixts.** with potassium **phosphates 41607-57-2D, mixts** . with potassium **phosphates**
RL: **AGR (Agricultural use)**; BIOL (Biological study); USES (Uses)
(fungicidal **compns.** for plants)
RN 7758-11-4 HCAPLUS
CN Phosphoric acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



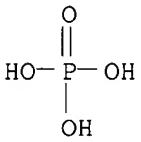
●2 K

RN 7778-53-2 HCAPLUS
CN Phosphoric acid, tripotassium salt (8CI, 9CI) (CA INDEX NAME)



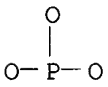
●3 K

RN 7778-77-0 HCAPLUS
CN Phosphoric acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



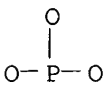
● K

RN 13492-26-7 HCAPLUS
CN Phosphonic acid, dipotassium salt (8CI, 9CI) (CA INDEX NAME)



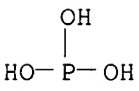
●2 K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 13977-65-6 HCAPLUS
CN Phosphonic acid, monopotassium salt (8CI, 9CI) (CA INDEX NAME)



● K

*** FRAGMENT DIAGRAM IS INCOMPLETE ***
RN 41607-57-2 HCAPLUS
CN Phosphorous acid, tripotassium salt (9CI) (CA INDEX NAME)



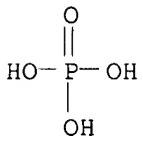
●3 K

L119 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2003 ACS
AN **1997:509045** HCAPLUS
DN **127:148720**
TI Manufacture of **phosphate** fertilizers fixed in carbonized hull
IN Igami, Chie
PA Igami, Chie, Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM C05B013-00
ICS C05G001-00
CC 19-6 (**Fertilizers**, Soils, and Plant Nutrition)
Section cross-reference(s): 49
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09194277	A2	19970729	JP 1996-22116	19960112 <--
PRAI JP 1996-22116		19960112 <--		

AB The title fertilizers are manufd. by impregnating .apprx.50-90 wt. parts hull with .apprx.10-50 wt. parts **phosphate** salts and AcOH contg. small amt. of H3PO4, then heating the impregnated hull under anaerobic conditions to carbonize the hull, to thermolyze/polymerize the **phosphate** salts, and to fix the resulting sol. polyphosphates in the formed C matrixes **simultaneously**. The polyphosphates are not absorbed or fixed by Fe or Al in soils, thus showing high utilization rate. Since the carbonized hull is porous, it also improves water permeability and water holding ability of soils.
ST polyphosphate manuf fertilizer fixation carbonized hull; acetate **phosphate** polymn hull carbonization fertilizer
IT Rice (Oryza sativa)
(husk; manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT **Phosphates**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(in manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT Immobilization, biochemical
(manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT **Fertilizers**
RL: AGR (Agricultural use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
(phosphorus; manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT Chaff
(rice husk; manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT Polyphosphates
RL: AGR (Agricultural use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sol.; manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT **Soil amendments**

(water-retaining; polyphosphate fertilizers fixed in carbonized hull as)
IT **10043-83-1**, Magnesium **phosphate**
RL: RCT (Reactant); RACT (Reactant or reagent)
(in manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT 7440-44-0, Carbon, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(manuf. of **phosphate** fertilizers fixed in carbonized hull)
IT **10043-83-1**, Magnesium **phosphate**
RL: RCT (Reactant); RACT (Reactant or reagent)
(in manuf. of **phosphate** fertilizers fixed in carbonized hull)
RN 10043-83-1 HCAPLUS
CN Phosphoric acid, magnesium salt (8CI, 9CI) (CA INDEX NAME)



●x Mg

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FILE LAST UPDATED: 24 MAR 2003 <20030324/UP>
MOST RECENT DERWENT UPDATE: 200320 <200320/DW>
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/BIX is also provided which comprises both /BI and /ABEX <<<

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GUIDES, PLEASE VISIT:
http://www.derwent.com/userguides/dwpi_guide.html <<<

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L154 ANSWER 1 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN **2002-608357** [65] WPIX
DNC **C2002-171959**
TI Composition useful for preventing and controlling fungicidal and bacterial diseases in plants comprises a phosphonate salt, a phosphate salt and a metal chelate.
DC C01
IN **TAYLOR, J B**

PA (FOLI-N) **FOLIAR NUTRIENTS INC**
CYC 95
PI WO 2002056680 A2 20020725 (200265)* EN 42p A01N000-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
ADT WO 2002056680 A2 WO 2001-US45376 20011031
PRAI US 2000-702417 20001031
IC ICM **A01N000-00**
AB WO 200256680 A UPAB: 20021010
NOVELTY - A composition comprises at least one phosphonate salt, at least one phosphate salt and at least one metal chelate.
DETAILED DESCRIPTION - A composition (C1) comprises:
(1) at least one first salt of formula (I);
(2) at least one second salt of formula (II) or of formula (III); and
(3) at least one metal chelate in which the metal is selected from row 4 or 5 of the periodic table of the elements.
R1 = H, K, 1-4C alkyl, halogen-substituted alkyl or nitro-substituted alkyl, alkenyl, halogen substituted alkenyl, alkynyl, halogen-substituted alkynyl, alkoxy-substituted alkyl or ammonium substituted by alkyl or hydroxy;
R2, R3 = H or K;
Me = K, alkaline earth metal cation, aluminum atom or an ammonium cation; and
n = 1 - 3.
INDEPENDENT CLAIMS are also included for the following:
(1) A method (I) of controlling fungicidal and/or bactericidal disease in plants involving applying to the plants an aqueous composition comprising an aqueous solution of H3PO3 and KOH, an aqueous solution of monopotassium phosphate and KOH or an aqueous solution of dipotassium phosphate and at least one metal chelate selected from row 4 or 5 of the periodic table of the elements; and
(2) A method (II) of controlling fungicidal and/or bactericidal disease in plants involving applying to the plants a composition (C2) comprising at least one metal chelate, at least one phosphate salt and at least one phosphonate salt in an aqueous solution.
ACTIVITY - Antibacterial; Fungicide.
MECHANISM OF ACTION - None given.
USE - For preventing and controlling fungicidal and bacterial diseases caused by phytophthora such as Phytophthora infestans in plants e.g. tomato and potato species (claimed).
ADVANTAGE - The compositions provide improved efficacy in controlling fungus and bacterial infections in plants, without the attendant phytotoxicity. The compositions are environmentally safe, comparatively inexpensive to use and have low mammalian toxicity. The composition provides a synergistic effect, which prevents the infection by at least 100%.
Dwg.0/0
FS CPI
FA AB; GI; DCN
MC CPI: **C05-A01A**; C05-A01B; C05-A03A; C05-B02A2; **C05-B02A3** ; C10-B01B; C14-A01; C14-A04
TECH UPTX: 20021010
TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Components: The metal chelate of (C1) and (C2) is present in an aqueous solution in an amount of 0.01 - 2 (preferably 0.01 - 0.8) pounds AI per acre. The metal chelates have a solubility of 100% where at least 80 pounds of the metal chelates are dissolved in water (100 gallons) at 50 degrees C. The metal chelates are added as aqueous solutions, which contain 1 - 5 wt.% of the metal chelates. The metal chelate is Cu-EDDHA (ethylenediamine-di-o-

hydroxyphenylacetic acid), Cu-para-EDDHA and/or Cu-EDDHMA (ethylenediamine-di-o-hydroxyphenylmethylacetic acid). The chelate constituents are selected from para-EDDHA, EDDHA or EDDHMA. The metal chelate of (C2) is selected from the 4th row of the periodic table. The metal chelate of the aqueous composition in (I) is present in an amount of 0.01 - 2 pounds AI per acre. (C1) and (C2) are in an aqueous solution, where the first and second salts are present in the aqueous solution in an amount of 0.1 - 1000 (preferably 20 - 200) millimolar. The weight ratio of the first and the second salt is 1:0.001 - 1:1000.
TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: In (I), the amount of potassium phosphonate in the aqueous solution and the amount of potassium phosphate in the aqueous solution is present in an amount of 0.1 - 1000 millimolar and the weight ratio is 1:0.001 - 1:1000.

L154 ANSWER 2 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 2001-355050 [37] WPIX
DNC C2001-109926
TI Plant fungicide composition effective against Phycomycetes and Ascomycetes, comprises potassium or ammonium phosphonate salt(s) and potassium or ammonium phosphate salt(s).
DC C01
IN **TAYLOR, J B**
PA (FOLI-N) **FOLIAR NUTRIENTS INC**
CYC 90
PI WO 2001028334 A1 20010426 (200137)* EN 20p A01N057-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2000077282 A 20010430 (200148) A01N057-00 <--
ADT WO 2001028334 A1 WO 2000-US26666 20000928; AU 2000077282 A AU 2000-77282 20000928
FDT AU 2000077282 A Based on WO 200128334
PRAI US 1999-418813 19991015
IC ICM **A01N057-00**
ICS **A01N057-10; A01N057-18; A01N059-26**
AB WO 200128334 A UPAB: 20010704
NOVELTY - A plant fungicide composition (I) comprises:
(a) at least one of K2HPO3, KH2PO3, K3PO3, (NH4)2HPO3 and (NH4)H2PO4 (i.e. mono-, di- or tripotassium or mono- or diammonium phosphonate); and
(b) K2HPO4, KH2PO4, K3PO4, (NH4)2HPO4 or (NH4)H2PO4 (i.e. mono-, di- or tripotassium or mono- or diammonium phosphate).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an alternative form of (I), comprising:
(a) at least one phosphonate salt of formula (II); and
(b) a salt of formula (III):
R1 = H, K, 1-4C alkyl, haloalkyl, nitroalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxyalkyl or ammonium substituted by alkyl or hydroxyalkyl;
R2, R3 = H or K;
M = K, alkaline earth metal, Al or ammonium; and
n = 1-3 (i.e. the valency of M).
ACTIVITY - Fungicide; pesticide; fertilizer.
In tests against Alternaria dauci in carrot plants, the average degree of infection was 28.8 % after treatment with 1 % potassium phosphonate (KH2PO3) solution, 10.7 % after treatment with 0.5 % potassium phosphonate/0.5 % potassium phosphate (K2HPO4) solution and 34.8 % in untreated controls.
MECHANISM OF ACTION - None given.
USE - For protecting plants against fungal attack, especially by Phycomycetes and Ascomycetes fungi. The plants to be protected include

fruit crops, agronomic crops, ornamentals, trees, grasses, vegetables, grains, flowers and some aquatic crops (e.g. watercress), but are especially citrus and fruit trees or vines.

ADVANTAGE - (I) provides protection against both Phycomycetes and Ascomycetes fungi from a single composition; does not cause pathological acerbation of Ascomycetes fungi; is environmentally safe and inexpensive to use; and has low mammalian toxicity. (I) may also show biocidal, arthropod pest controlling and fertilizing effects.

Dwg.0/0

FS CPI

FA AB; GI; DCN

MC CPI: **C05-A01A**; C05-A01B; C05-B01P; C05-B02A2; **C05-B02A3** ; C14-A06

TECH UPTX: 20010704

TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: (I) comprises an aqueous solution, containing each of (a) and (b) at 20 mM to 5 % v/v. The weight ratio of (a) to (b) is 1 : 0.001-1000.

L154 ANSWER 3 OF 10 WPIX (C) 2003 THOMSON DERWENT

AN 2001-290777 [30] WPIX

CR 1998-239160 [21]; 1998-494717 [42]; 1999-418254 [35]; 2000-095913 [08]

DNC C2001-089169

TI Plant fungicide composition effective against Phytophthora, especially late blight, containing potassium or ammonium phosphonate salt(s) and potassium or ammonium phosphate salt(s).

DC C01

IN **TAYLOR, J B**

PA (FOLI-N) **FOLIAR NUTRIENTS INC**; (TAYL-I) TAYLOR J B

CYC 92

PI WO 2001028335 A1 20010426 (200130)* EN 23p A01N057-00 <--
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001014935 A 20010430 (200148) A01N057-00 <--
US 6338860 B1 20020115 (200208) A01N059-26 <--
US 2002048609 A1 20020425 (200233) A01N057-00 <--
EP 1221850 A1 20020717 (200254) EN A01N057-00 <--
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 6509041 B2 20030121 (200309) A01N059-26 <--

ADT WO 2001028335 A1 WO 2000-US41021 20000928; AU 2001014935 A AU 2001-14935 20000928; US 6338860 B1 CIP of US 1996-705594 19960830, Div ex US 1997-812865 19970306, CIP of US 1998-109139 19980702, US 1999-419127 19991015; US 2002048609 A1 CIP of US 1996-705594 19960830, Div ex US 1997-812865 19970306, CIP of US 1998-109139 19980702, Div ex US 1999-419127 19991015, US 2001-954926 20010918; EP 1221850 A1 EP 2000-977279 20000928, WO 2000-US41021 20000928; US 6509041 B2 CIP of US 1996-705594 19960830, Div ex US 1997-812865 19970306, CIP of US 1998-109139 19980702, Div ex US 1999-419127 19991015, US 2001-954926 20010918

FDT AU 2001014935 A Based on WO 200128335; US 6338860 B1 CIP of US 5736164, Div ex US 5800837, CIP of US 5997910; US 2002048609 A1 CIP of US 5736164, Div ex US 5800837, CIP of US 5997910; EP 1221850 A1 Based on WO 200128335; US 6509041 B2 CIP of US 5736164, Div ex US 5800837, CIP of US 5997910, Div ex US 6338860

PRAI US 1999-419127 19991015; US 1996-705594 19960830; US 1997-812865 19970306; US 1998-109139 19980702; US 2001-954926 20010918

IC ICM **A01N057-00; A01N059-26**
ICS **A01N057-10; A01N057-18**

AB WO 200128335 A UPAB: 20030206

NOVELTY - A composition (A) for preventing and controlling plant diseases caused by Phytophthora contains effective amounts of (a) at least one phosphonate salt (I) and (b) a phosphate salt.

DETAILED DESCRIPTION - A composition (A) for preventing and controlling plant diseases caused by Phytophthora contains effective amounts of (a) at least one phosphonate salt of formula (I) and (b) a phosphate salt of formula (II).

R1 = H, K, 1-4C alkyl, haloalkyl, nitroalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxyalkyl or ammonium substituted by alkyl or hydroxyalkyl;

R2, R3 = H or K;

M = K, alkaline earth metal, Al or ammonium;

n = 1-3 (i.e. the valency of M).

INDEPENDENT CLAIMS are included for: (i) a corresponding plant treatment method; and (ii) (A) as a composition for preventing diseases in plants caused by Phytophthora, Phycomycetes, Ascomycetes, other fungi and bacteria, where (a) and (b) have a synergistic disease control effect.

ACTIVITY - Fungicidal; bactericidal. In tests against Phytophthora infestans in potatoes, the average degree of infection was 1.85% after treatment with 1% potassium phosphonate (KH2PO3) solution, 18.45% after treatment with 1% potassium phosphate (K2HPO4) solution, 0.39% after treatment with 1% potassium phosphonate/1% potassium phosphate solution and 28.12% in untreated controls.

MECHANISM OF ACTION - None given.

USE - Especially for protecting tomato and potato plants against attack by Phytophthora infestans (claimed), i.e. late blight. (A) may be used before or after infection by the Phytophthora organism. (A) may also be effective in protecting plants against other fungi (specifically Phycomycetes, Ascomycetes) and bacteria. More generally the plants to be protected include fruit crops, agronomic crops, ornamentals, trees, grasses, vegetables, grains, flowers and some aquatic crops (e.g. watercress).

ADVANTAGE - (I) and (II) have a synergistic effect against Phytophthora fungi, especially Phytophora infestans. (A) is environmentally safe and inexpensive to use; and has low mammalian toxicity.

Dwg.0/0

FS CPI
FA AB; DCN
MC CPI: C05-B01P; C14-A01; C14-A06
TECH UPTX: 20010603

TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: (a) is K2HPO3 (most preferred), KH2PO3, K3PO3, (NH4)2HPO3 or (NH4)H2PO4 (i.e. mono-, di- or tripotassium or mono- or diammonium phosphonate) and (b) is K2HPO4 (most preferred), KH2PO4 or K3PO4 (i.e. mono-, di- or tripotassium phosphate). (A) comprises an aqueous solution, containing each of (a) and (b) at 20 mM to 5% v/v. The weight ratio of (a) to (b) is 1 : 0.001-1000.

L154 ANSWER 4 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 2000-095913 [08] WPIX
CR 1998-239160 [21]; 1998-494717 [42]; 1999-418254 [35]; 2001-290777 [30]
DNC C2000-027868
TI Fertilizer composition for fruit and agronomic crops, ornamentals, trees, grasses consists of phosphonate and phosphate salts.
DC C04
IN **TAYLOR, J B**
PA (TAYL-I) TAYLOR J B
CYC 1
PI US 5997910 A 19991207 (200008)* 6p A01N059-26 <--
ADT US 5997910 A CIP of US 1996-705594 19960830, Div ex US 1997-812865 19970306, US 1998-109139 19980702
FDT US 5997910 A CIP of US 5736164, Div ex US 5800837
PRAI US 1997-812865 19970306; US 1996-705594 19960830; US 1998-109139

19980702
IC ICM **A01N059-26**
ICS C05B007-00; C05G003-00; C05G003-02
AB US 5997910 A UPAB: 20020524
NOVELTY - A fertilizer composition for stimulating enhanced growth comprises an aqueous solution of phosphonate and phosphate salts. The salts are present in the aqueous solution in an amount of 0.25-5% vol/vol.

DETAILED DESCRIPTION - The fertilizer composition for stimulating enhanced growth comprises phosphate and phosphonate salts of formula (I) and (II).

R1 = H, K, 1-4C alkyl, halo or nitro substituted alkyl, alkenyl, alkynyl, halogen substituted alkenyl or alkynyl, alkoxy substituted alkyl radical or ammonium substituted by alkyl or hydroxy alkyl radicals;

R2,R3 = H, potassium;

Me = potassium, alkaline earth metal cations, aluminum atom or ammonium cation;

n = 1, 2 or 3 and is equal to valence of Me.

The salts are present in the aqueous solution in an amount of 0.25-5% vol/vol.

ACTIVITY - Fungicidal.

1% of potassium phosphonate and 1% of potassium phosphate solution were applied to dogwood infected by mildew. When only potassium phosphonate solution was applied, pathological acerbation of the ascomycete fungus occurred in 100% of the dogwood leaves, while only 30% of infection was present in the control. But if potassium phosphonate was combined with potassium phosphate and it was applied to the dogwood, it completely eliminated the pathological acerbation and also reduced the amount of infection by 20%.

MECHANISM OF ACTION - None given.

USE - For fruit crops, agronomic crops, ornamentals, trees, grasses, vegetables, grains, floricultural crops and some aquatic crops including water cress.

ADVANTAGE - The fertilizer composition protects the plants against fungal infection especially Phycomycetes and Ascomycetes. It is environmentally safe, inexpensive and has low mammalian toxicity. It is effective as a growth stimulator and fertilizer.

Dwg.0/0
FS CPI
FA AB; GI; DCN
MC CPI: C05-B01P; C05-B02A2; **C05-B02A3**; C14-T03; C14-T04
TECH UPTX: 20000215
TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: The amount of salts (I) and (II) in the composition is 1 part by weight and 0.001-1000 parts by weight respectively.

L154 ANSWER 5 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 1999-418254 [35] WPIX
CR 1998-239160 [21]; 1998-494717 [42]; 2000-095913 [08]; 2001-290777 [30]
DNC C1999-122806
TI Plant antifungal composition used for controlling e.g. Phycomycetes and Ascomycetes infection.
DC C01
IN **TAYLOR, J B**
PA (TAYL-I) TAYLOR J B
CYC 1
PI US 5925383 A 19990720 (199935)* 8p A01N057-00 <--
ADT US 5925383 A Div ex US 1996-705594 19960830, US 1997-943002 19971002
FDT US 5925383 A Div ex US 5736164
PRAI US 1996-705594 19960830; US 1997-943002 19971002
IC ICM **A01N057-00**
ICS **A01N057-10; A01N057-18; A01N059-26**
AB US 5925383 A UPAB: 20020524

NOVELTY - Fungicidal composition for controlling fungus in plants comprises phosphate and phosphonate salts.

DETAILED DESCRIPTION - Fungicidal composition for controlling fungus in plants comprises at least one first phosphonate salt of formula (I), and a second phosphate salt of formula (II).

R1 = H, K, 1-4C alkyl, haloalkyl, nitroalkyl, alkenyl, haloalkenyl, alkynyl, haloalkynyl, alkoxyalkyl, alkyl ammonium, or hydroxyalkyl; R2, R3 = H or K;

M = K, alkaline earth metal cation, aluminum atom or ammonium cation; and

n = 1-3, equal to the valency of M.

The composition comprises an aqueous solution each of (I) and (II) being present in solution in amount 20 mmol to 5 % vol./vol., or the amount of (I) is 1 part by weight, and the amount of (II) is 0.001-1000 parts by weight.

ACTIVITY - Antifungal.

USE - The composition is used for controlling fungal disease in plants (claimed), especially Phycomycetes and Ascomycetes, and also Phytophthoran, Phythium, and Plasmopara. The composition can be used to protect citrus and fruit trees and vines. The composition may also have biocidal and arthropod pest control activity, and also have fertilizer effects.

ADVANTAGE - The composition does not cause pathological acerbation of Ascomycetes infections. The composition is environmentally safe, inexpensive to use, and has low mammalian toxicity.

Dwg.0/0

FS CPI
FA AB; GI; DCN
MC CPI: C05-B01G; C05-B01P; C14-A06; C14-B04; C14-T04

L154 ANSWER 6 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 1999-254552 [21] WPIX
DNC C1999-074444
TI Fungicidal compositions for protecting plants from parasitic fungi especially those caused by Phycomycetes and Ascomycetes.
DC C01 C03
IN **TAYLOR, J B**
PA (FOLI-N) **FOLIAR NUTRIENTS INC**
CYC 75
PI WO 9915017 A1 19990401 (199921)* EN 22p A01N057-00 <--
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN
AU 9744953 A 19990412 (199934) A01N057-00 <--
AU 741341 B 20011129 (200206)# A01N057-00 <--
NZ 503394 A 20020301 (200224) A01N057-00 <--
AU 2002018813 A 20020418 (200234)# A01N057-00 <--
ADT WO 9915017 A1 WO 1997-US16997 19970919; AU 9744953 A AU 1997-44953 19970919, WO 1997-US16997 19970919; AU 741341 B AU 1997-44953 19970919; NZ 503394 A NZ 1997-503394 19970919, WO 1997-US16997 19970919; AU 2002018813 A Div ex AU 1997-44953 19970919, AU 2002-18813 20020228
FDT AU 9744953 A Based on WO 9915017; AU 741341 B Previous Publ. AU 9744953, Based on WO 9915017; NZ 503394 A Based on WO 9915017; AU 2002018813 A Div ex AU 741341
PRAI WO 1997-US16997 19970919; AU 2002-18813 20020228
IC ICM **A01N057-00**
ICS **A01N057-10; A01N057-18; A01N059-26**
AB WO 9915017 A UPAB: 20011203
NOVELTY - Fungicidal compositions comprise phosphonate salts and phosphate salt.

DETAILED DESCRIPTION - Fungicidal compositions comprise phosphonate

salts of formula (I) and phosphate salts of formula (II):
R1 = alkenyl or alkynyl (both optionally substituted by halo), 1-4C alkyl, alkyl (substituted with NO2, halo or alkoxy), ammonium substituted by alkyl or hydroxyalkyl, H or potassium;
R2,R3 = H or K;
M = aluminum, alkaline earth metal or ammonium cations, or K; and
n = 1-3 and is equal to the valence of M.
An INDEPENDENT CLAIM is also included for a fungicidal composition comprising mono, di or tripotassium phosphonate and mono, di or tripotassium phosphate.
ACTIVITY - Fungicidal; anti-fungal protectant; biocidal; anti-arthropod pest control; fertilizer.
MECHANISM OF ACTION - Ethylene production stimulator.
USE - To control fungus diseases, especially those caused by Phycomycetes and Ascomycetes (including Phyllactinia corylia), on agronomic crops, ornamental plants, trees, grasses, vegetables, grains, some aquatics plants (e.g. water cress), flowers and fruit crops (e.g. grape vines, citrus). An aqueous solution (% per 100 gallons) of potassium phosphate (1) and potassium phosphonate (1) was sprayed on to Shumard Oak trees. Its anti-fungal activity against Phyllactinia corylea (powdery mildew) was compared against controls of no treatment, (% per 100 gallons) potassium phosphonate solution (1) and potassium phosphate (2). Samples were allocated by a randomized complete block design and 4 repetitions were used with an average of ten 30 gallon plots were used per sample. The infection rate, measured as percentage of leaves infected, was: control 20, potassium phosphonate 40, potassium phosphonate / potassium phosphate mixture 0, potassium phosphate 0. Phytotoxicity, as determined by crop injury to leaves falling from the plants, was nil for all groups.
ADVANTAGE - The use of phosphonate salts alone to control fungal growth can lead to an eiphotic outbreak of ascomycete infections, often more widespread than in unprotected plants. This pathological acerbation is avoided by the use of the new compositions. Plants can be protected from fungal infections inexpensively and with agents that are non-toxic to mammals.
Dwg.0/0

FS CPI
FA AB; GI; DCN
MC CPI: **C05-B02A3**; C14-A04; C14-A06
TECH UPTX: 19990603
TECHNOLOGY FOCUS - AGRICULTURE - Preferred Composition: The phosphonate and phosphate salts are in aqueous solution and are each present in concentrations of 20 mmole - 5 vol.%. The phosphonate:phosphate ratio (parts by weight) is 1: 0.001-1000.

L154 ANSWER 7 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 1998-494717 [42] WPIX
CR 1998-239160 [21]; 1999-418254 [35]; 2000-095913 [08]; 2001-290777 [30]
DNC C1998-148956
TI Fertiliser and plant growth composition - comprises phosphate and phosphonate salts and their derivatives.
DC C04
IN **TAYLOR, J; TAYLOR, J B**
PA (TAYL-I) TAYLOR J; (FOLI-N) **FOLIAR NUTRIENTS INC**
CYC 81
PI US 5800837 A 19980901 (199842)* 6p A01N059-26 <--
WO 9838863 A1 19980911 (199842) EN A01N057-00 <--
RW: AT BE CH DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW
AU 9861809 A 19980922 (199908) A01N057-00 <--

MX 9908200 A1 19991201 (200110) A01N057-00 <--
AU 749891 B 20020704 (200255) A01N057-00 <--
ADT US 5800837 A CIP of US 1996-705594 19960830, US 1997-812865 19970306; WO 9838863 A1 WO 1998-US3459 19980224; AU 9861809 A AU 1998-61809 19980224; MX 9908200 A1 MX 1999-8200 19990906; AU 749891 B AU 1998-61809 19980224
FDT US 5800837 A CIP of US 5736164; AU 9861809 A Based on WO 9838863; AU 749891 B Previous Publ. AU 9861809, Based on WO 9838863
PRAI US 1997-812865 19970306; US 1996-705594 19960830
IC ICM **A01N057-00; A01N059-26**
ICS **A01N057-10; A01N057-18; A01N057-26;** C05B007-00; C05G003-00; C05G003-02
AB US 5800837 A UPAB: 20020829
A fertiliser composition for stimulating growth in plants comprises a growth stimulating effective amount of at least a first salt selected from K2HPO3, KH2PO3 and K3PO3, and a second salt selected from K2HPO4, KH2PO4 and K3PO4.

Also claimed is the stimulation of growth in plants by applying a composition comprising a growth stimulating effective amount of at least a first salt selected from K2HPO3, KH2PO3 and K3PO3, and a second salt selected from K2HPO4, KH2PO4 and K3PO4.

USE - The composition is used as a growth stimulant, and as a phosphate fertiliser.

ADVANTAGE - The composition shows improved antifungal activity against Phycomycetes and Ascomycetes, and does not cause pathological acerbation of Ascomycetes infections.

Dwg.0/0
FS CPI
FA AB; DCN
MC CPI: **C05-A01A; C05-B02A3;** C05-B02A5; C14-A04; C14-A06; C14-T03; C14-U01

L154 ANSWER 8 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN 1998-239160 [21] WPIX
CR 1998-494717 [42]; 1999-418254 [35]; 2000-095913 [08]; 2001-290777 [30]
DNC C1998-074603
TI Fungicidal composition for plants - comprises potassium phosphonate and potassium phosphate salts.
DC C03
IN **TAYLOR, J B**
PA (TAYL-I) TAYLOR J B
CYC 1
PI US 5736164 A 19980407 (199821)* A01N059-26 <--
ADT US 5736164 A US 1996-705594 19960830
PRAI US 1996-705594 19960830
IC ICM **A01N059-26**
AB US 5736164 A UPAB: 20020524
Fungicidal composition for plants comprises: (a) a first salt selected from dipotassium phosphonate (K2HPO3), tripotassium phosphonate (K3PO3), or preferably monopotassium phosphonate (KH2PO3); and (b) a second salt selected from dipotassium phosphate (K2HPO4), tripotassium phosphate (K3PO4) or preferably monopotassium phosphate (KH2PO4) as an aqueous solution containing 20 millimole to 5 vol./vol. % (a) and (b).

USE - The phosphonates in the composition are of use in protecting plants, particularly grape vines, citrus and fruit trees and tropical plants from fungal attack e.g. from Phycomycetes. The phosphonates enhance the phytoimmune system when assimilated by triggering the induction of ethylene production, followed by a rapid accumulation of phytoalexins at the site of infection.

ADVANTAGE - The combination of phosphates with phosphonates in the fungicidal composition allows the control of e.g. Phycomycetes and Ascomycetes without causing the pathological acerbation, e.g the eiphytotic outbreak of Ascomycetes fungi caused by use of phosphonate compositions used alone.

Dwg.0/0
FS CPI
FA AB
MC CPI: **C05-B02A3**; C14-A06

L154 ANSWER 9 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN **1982-22869E** [12] WPIX
CR 1975-31251W [19]
TI Increasing resistance of perennial plants to cold weather - by foliar application of aq. soln. of water-soluble condensed **phosphate**.
DC C03
PA (SEIK-N) SEIKAKEN KK
CYC 1
PI JP 57026608 A 19820212 (198212)* 3p <--
PRAI **JP 1972-113842 19721115; JP 1980-129123 19800722**
IC **A01N059-26**
AB JP 57026608 A UPAB: 19930915
Agent for increasing cold weather resistance of perennial plant by foliar application, comprises aq. soln. of water-soluble condensed **phosphate** (salt). The cationic part of the condensed **phosphoric** acid salt may be any organic metal cation, pref. potassium. The concn. of the condensed **phosphoric** acid salt is 0.05-1% (as P2O5).

Germination disorders of grape due to cold weather can be prevented, and good harvest yields obtd. Further, death of tea leaves and mulberry leaves due to late frost can be prevented.

In an example, **orthophosphoric** acid and **phosphoric** acid anhydride are mixed and condensed under heating to give condensed **phosphoric** acid of following composition: **orthophosphoric** acid 6%, **pyrophosphoric** acid 19%, tri **polyphosphoric** acid 18%, tetra **polyphosphoric** acid 15% and more than penta-**polyphosphoric** acid 42%. About 85% of all of the free hydroxy gps. of this condensed **phosphoric** acid is neutralised with aq. soln. of potassium hydroxide to give a cold weather resistance increasing agent of following composition: P2O5 15 wt.%, K2O 14 wt.% and H2O 71 wt.%. When applying to foliage, this agent is diluted so that the P2O5 content is 0.05-1%, and then applied.
FS CPI
FA AB
MC CPI: **C05-B02A3**; C12-P10

L154 ANSWER 10 OF 10 WPIX (C) 2003 THOMSON DERWENT
AN **1980-15727C** [09] WPIX
TI Agent for preventing withering of rice - contains at least two **phosphate** component, potassium component and iron component.
DC C03
PA (NISC) NISSAN CHEM IND LTD
CYC 1
PI JP 55009050 A 19800122 (198009)* <--
JP 61039922 B 19860906 (198640) <--
PRAI **JP 1978-82597 19780707**
IC **A01N059-26**
AB JP 55009050 A UPAB: 19930902
The agent contains as active component >=2 components selected from **phosphate** component, K component and Fe component.

Phosphate components include e.g. Na **phosphate**, Mg **phosphate**, Ca **phosphate**, etc. K components include e.g. KCl, K2SO4, etc. K **phosphate** is particularly suitable since it contains both the **phosphate** and K components. Iron components include e.g. Fe chelate cpd. and inorganic Fe salt.
FS CPI
FA AB
MC CPI: **C05-A01A**; C05-A03A; **C05-B02A3**; C12-P10

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 10:36:00 ON 27 MAR 2003
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FILE COVERS 1907 - 27 Mar 2003  VOL 138 ISS 13
FILE LAST UPDATED: 26 Mar 2003  (20030326/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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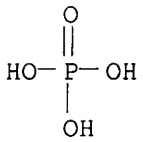
L158 ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS
AN   1985:191186  HCAPLUS
DN   102:191186
TI   Soft gelatin capsules containing vitamin E and vitamin A
IN   Ismail, Roshdy
PA   Fed. Rep. Ger.
SO   Ger. Offen., 17 pp.
     CODEN: GWXXBX
DT   Patent
LA   German
IC   ICM  A61K031-355
     ICS  A61K031-07
CC   63-6 (Pharmaceuticals)
     Section cross-reference(s): 18
FAN.CNT 7
     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
PI   DE 3426935         A1   19850307       DE 1984-3426935   19840721 <--
PRAI DE 1983-3329440         19830816  <--
     DE 1983-3337186         19831013  <--
     DE 1984-3405991         19840220  <--
AB   Capsules providing vitamin A  [11103-57-4] together with a high dose of
     vitamin E  [1406-18-4] contain vitamin E 60-93, vitamin A 0-11, neutral
     fatty oil 4-30, and emulsifier 0.4-10% by wt.  The soft capsules are easy
     to take, are absorbed easily, and storage stable.  Soft gelatin capsules
     contained vitamin A palmitate  [79-81-2] 13.75-15.125,
     dl-.alpha.-tocopherol acetate  [52225-20-4] 200-210, soybean oil 42.5,
     peanut oil 12.375, and Polysorbate 80  [9005-65-6] 10 mg.  The gelatin
     coating, 106.33-124.83 mg, contained gelatin 75-88, 85% glycerol 21, and
     sorbitol, sorbitan and mannitol 12-14 mg.
ST   tocopherol vitamin A capsule
IT   Corn oil
     Peanut oil
     RL: BIOL (Biological study)
        (capsules contg. emulsifiers and oils and)
```

IT Castor oil
RL: BIOL (Biological study)
(ethoxylated hydrogenated, vitamin E capsules contg.)
IT Soybean oil
RL: BIOL (Biological study)
(vitamin E capsules contg.)
IT 58-95-7 59-02-9 59-43-8, biological studies 68-19-9 79-81-2
83-88-5, biological studies 98-92-0 127-47-9 1406-18-4 2074-53-5
3687-45-4 **7757-86-0** 7779-25-1 8059-24-3 9005-65-6
9016-45-9 11103-57-4 18962-61-3 34717-03-8 39279-69-1 52225-20-4
RL: BIOL (Biological study)
(capsules contg. emulsifiers and oils and)
IT **7757-86-0**
RL: BIOL (Biological study)
(capsules contg. emulsifiers and oils and)
RN 7757-86-0 HCAPLUS
CN Phosphoric acid, magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



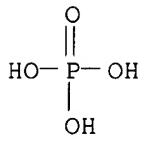
● Mg

L158 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS
AN **1983:458755** HCAPLUS
DN **99:58755**
TI Magnesium phosphate for stabilization of calcium hydrogen phosphate dihydrate for tooth paste
PA Central Glass Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C01B025-34; A61K007-16; C01B025-32
CC **62-7** (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58015017	A2	19830128	JP 1981-109262	19810715 <--
	JP 62035962	B4	19870805		
PRAI	JP 1981-109262		19810715 <--		

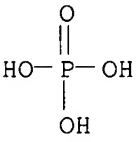
AB CaHPO4.2H2O in tooth pastes is stabilized by magnesium phosphate. Thus, MgSO4 (a 10% soln.) was added to a 10% NaH2PO4 soln. such that the Mg/P mol ratio became 1.5, and the pH was kept >9 during the reaction by adding 5N NaOH at 35.degree. for 1 h. The size of crystals formed was 50-150 .mu., and the crystals were isolated, washed, and dried. The crystals were Mg3(PO4)2.8H2O. The stability of CaHPO4.2H2O in the presence of Mg3(PO4)2.8H2O in a test medium, glycerin, was demonstrated.
ST calcium magnesium phosphate toothpaste
IT Dentifrices
(calcium phosphate stabilization in, by magnesium phosphate)
IT **7757-87-1**
RL: BIOL (Biological study)
(calcium phosphate stabilization by, in toothpaste)
IT **7757-93-9**

RL: PROC (Process)
(stabilization of, in toothpaste by magnesium phosphate)
IT **7757-87-1**
RL: BIOL (Biological study)
(calcium phosphate stabilization by, in toothpaste)
RN 7757-87-1 HCAPLUS
CN Phosphoric acid, magnesium salt (2:3) (8CI, 9CI) (CA INDEX NAME)



● 3/2 Mg

IT **7757-93-9**
RL: PROC (Process)
(stabilization of, in toothpaste by magnesium phosphate)
RN 7757-93-9 HCAPLUS
CN Phosphoric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



● Ca

L158 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS
AN **1983:427829** HCAPLUS
DN **99:27829**
TI Stabilized calcium hydrogen phosphate dihydrate for toothpaste
PA Central Glass Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC C01B025-32; A61K007-16
CC **62-7** (Essential Oils and Cosmetics)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 58015015	A2	19830128	JP 1981-109264	19810715 <--
	JP 62035963	B4	19870805		
PRAI	JP 1981-109264		19810715 <--		

AB Toothpastes contain noncryst. Mg3(PO4)2 and stabilized CaHPO4.2H2O crystals prepd. from a reaction of alkali metal phosphate with Ca at <40.degree. and pH 2.5-3.5 and then at <40.degree. and pH 3.5-5.0. Unlike conventional toothpastes, these prepns. do not cause dehydration of CaHPO4.2H2O and, as a result, the prepns. are stable. Thus, a NaNH4HPO4 soln. (contg. 7% P2O5) was treated with 20% CaCl2 (mol. ratio of Ca/P1.10) at 30.degree. and pH 2.7 (pH adjusted with 35% HCl) and then at 30.degree.

and pH 4.3 [pH adjusted with 20% Ca(OH)2] to give a slurry, which was sepd. washed and dried at 50.degree. to produce a cryst. CaHPO4.2H2O mixt. Sep., 10% NaH2PO4 was gradually added to 10% MgSO4 while 5N NaOH was added to maintain a pH of <9. The reaction mixt. with a Mg/P mol. ratio of 1.5 was incubated at 35.degree. for 1 h, filtered, washed and dried at 40.degree. to form Mg(PO4)2 crystals (50-150 .mu.). A toothpaste contg. 100 parts CaHPO4.2H2O, 3 parts Mg3(PO4)2 and other components had sp. gr of 0.89 g/mL and was stable at 50.degree. for up to 6 mo.

ST toothpaste calcium phosphate; magnesium phosphate toothpaste stabilizer

IT Dentifrices
(calcium phosphate and magnesium phosphate in)

IT 13011-54-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with calcium chloride)

IT 7558-80-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with magnesium sulfate)

IT 10043-52-4, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sodium ammonium phosphate)

IT 7487-88-9, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with sodium dihydrogen phosphate)

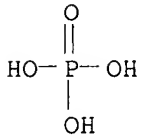
IT **7757-87-1**
RL: BIOL (Biological study)
(toothpaste contg. calcium phosphate and)

IT 7789-77-7
RL: BIOL (Biological study)
(toothpaste contg. magnesium phosphate and)

IT **7757-87-1**
RL: BIOL (Biological study)
(toothpaste contg. calcium phosphate and)

RN 7757-87-1 HCAPLUS

CN Phosphoric acid, magnesium salt (2:3) (8CI, 9CI) (CA INDEX NAME)



●3/2 Mg

=> d his

(FILE 'STNGUIDE' ENTERED AT 07:43:33 ON 27 MAR 2003)
DEL HIS

FILE 'REGISTRY' ENTERED AT 07:46:51 ON 27 MAR 2003

L1 1 S 7664-38-2
L2 13873 S 7664-38-2/CRN
L3 770 S L2 AND K/ELS
L4 523 S L2 AND H3N
L5 24 S L3 AND 2/NC
L6 8 S L5 NOT IDS/CI
L7 7 S L6 NOT FK
L8 22 S L4 AND 2/NC

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L9          13 S L8 NOT IDS/CI
L10         11 S L9 NOT 15N
L11         22 S L2 AND H3O3P
L12         14 S L11 AND NR>=1
L13          8 S L11 NOT L12
L14          2 S L13 AND ("H3O4P.H3O3P.3K" OR "H3O4P.H3O3P.4K")/MF
L15        680 S L2 AND CA/ELS
L16         43 S L15 AND 2/NC
L17         16 S L16 NOT IDS/CI
L18         13 S L17 NOT (45CA OR MXS/CI)
L19         12 S L18 NOT MNS/CI
L20          5 S L2 AND BA/ELS AND 2/NC NOT IDS/CI
L21          4 S L20 NOT MNS/CI
L22          6 S L2 AND SR/ELS AND 2/NC NOT (IDS OR MNS)/CI
L23          5 S L22 NOT 87SR
L24          9 S L2 AND AL/ELS AND 2/NC NOT (IDS OR MNS)/CI
L25          8 S L24 NOT ALN
L26         11 S L19 NOT 45CA3
L27         46 S L7,L10,L21,L23,L25,L26
L28         44 S L27 NOT PMS/CI
L29         10 S L2 AND O4P
L30          8 S L29 NOT (TI/ELS OR C20H18NO4)
L31          1 S 13598-36-2
L32        739 S 13598-36-2/CRN
L33         22 S L32 AND L2
L34         20 S L33 NOT L14
L35        717 S L32 NOT L33
L36        113 S L35 AND (K OR CA OR BA OR SR OR AL OR H3N)
L37         27 S L36 AND 2/NC
L38         15 S L35 AND (BE OR MG)/ELS
L39          9 S L38 AND 2/NC
L40        396 S L2 AND (MG OR BE)/ELS
L41         12 S L40 AND 2/NC NOT (IDS OR MNS OR PMS)/CI
L42         11 S L41 NOT MXS/CI
L43         55 S L28,L42
L44         38 S L37,L42

     FILE 'HCAPLUS' ENTERED AT 08:12:47 ON 27 MAR 2003
L45          3 S L14
L46      44787 S L43
L47       2834 S L44
L48       2522 S L46 AND L47
L49       1634 S L43 (L) AGR/RL
L50         94 S L47 (L) AGR/RL
L51        760 S L46 AND AGRO?/SC,SX
L52         72 S L47 AND AGRO?/SC,SX
L53       3999 S L46 AND FERTIL?/SC,SX
L54        182 S L47 AND FERTIL?/SC,SX
               E FERTILI/CT
               E E20+ALL
               E E2+ALL
               E E7+ALL
L55      54498 S E6,E5+NT
L56      22352 S E16+NT OR E18+NT OR E19+NT
L57       2858 S L46 AND L55,L56
L58        146 S L47 AND L55,L56
L59       4891 S L49,L51,L53,L57
L60        261 S L50,L52,L54,L58
L61        213 S L59 AND L60
L62         68 S L61 AND (SYNERG? OR MIX? OF COMBIN? OR COMPOSITION OR FORMUL?
               E TAYLOR J/AU
L63        447 S E3,E10-E16
               E TAYLOR JOHN/AU
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L64          268 S E3,E12-E18
                 E FOLIAR/PA,CS
L65            7 S E3-E6
L66            5 S L65 AND L45-L62
L67            8 S L63,L64 AND L45-L62
L68            8 S L45,L66,L67
L69            2 S L65 NOT L68
L70            1 S L69 AND L63-L64
L71            9 S L68,L70
L72            8 S L71 NOT ICEBERG/TI
L73            8 S L72 AND (SYNERG? OR MIX? OR COMBIN? OR COMPOSITION OR FORMUL?
L74          203 S L61 AND (L1 OR L31 OR PHOSPHONATE OR PHOSPHATE)
L75           63 S L62 AND L74
L76            5 S L62 NOT L75
L77            7 S L73 AND L74
L78            8 S L73,L77

     FILE 'REGISTRY' ENTERED AT 08:35:37 ON 27 MAR 2003
L79            1 S 41607-57-2
L80            1 S 10294-56-1
L81          136 S 10294-56-1/CRN
L82           24 S L81 AND (K OR CA OR BA OR SR OR AL OR H3N OR BE OR MG)
L83            0 S L82 AND L2
L84            7 S L82 AND 2/NC

     FILE 'HCAPLUS' ENTERED AT 08:37:24 ON 27 MAR 2003
L85           72 S L84
L86           22 S L85 AND L46
L87            5 S L86 AND L59
L88           10 S L78,L87
L89           17 S L86 NOT L88
                 SEL DN AN 6-8
L90           10 S L88 AND L45-L78,L85-L89
L91           68 S L62,L75 NOT L89
L92           54 S L91 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L93           48 S L91 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
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                 SEL DN AN 7
L95            1 S L94 AND E10-E12
L96            5 S L92 NOT L93,L88
L97           11 S L88,L95

     FILE 'REGISTRY' ENTERED AT 08:56:09 ON 27 MAR 2003
L98            1 S 15477-76-6
L99            1 S 14265-44-2
L100           2 S L98,L99
                 SEL RN
L101       12244 S E13-E14/CRN
L102          10 S L2 AND L101
L103        5982 S L101 AND (K OR CA OR BA OR SR OR AL OR H3N OR BE OR MG)
L104         477 S L103 AND 2/NC
L105         403 S L104 NOT (MNS OR MXS OR IDS OR PMS)/CI
L106           2 S L105 NOT (TIS OR AYS)/CI

     FILE 'HCAPLUS' ENTERED AT 08:59:02 ON 27 MAR 2003
L107       33667 S L98,L99
L108         185 S L107 AND L59
L109         164 S L108 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
L110         156 S L108 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L111          55 S L109,L110 AND (SYNERG? OR MIX? OR COMPOSITION OR COMBIN? OR F
L112           1 S L97 AND L108
L113          11 S L97,L112
L114           1 S L97 AND L107
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L115          11 S L113,L114
L116          53 S L111 NOT L112-L115,L91-L97
L117          11 S L115 AND L45-L78,L85-L97,L107-L116
L118          10 S L117 AND (PHOSPHATE OR PHOSPHONATE OR PHOSPHORIC)
L119          11 S L117,L118

     FILE 'HCAPLUS' ENTERED AT 09:07:08 ON 27 MAR 2003
L120        2708 S L48,L86,L108
L121          37 S L120 AND A01N/IC,ICM,ICS
L122          28 S L121 NOT L119
L123          25 S L122 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)

     FILE 'WPIX' ENTERED AT 09:15:14 ON 27 MAR 2003
                E A01N059-26/IC,ICM
L124         553 S E3,E4
                E A01N059-26/ICS
L125         244 S E3
L126         553 S L124,L125
                E TAYLOR J/AU
L127         257 S E3,E7-E9
                E FOLIAR/PA
L128           9 S E3,E4
L129           7 S L126 AND L127,L128
L130          13 S A01N/IC,ICM,ICS AND L127,L128
L131           6 S L130 NOT L129
                SEL DN AN 1
L132           1 S L131 AND E1-E2
L133           8 S L129,L132 AND L124-L132
L134        9782 S (C05-B02A OR B05-B02A OR C05-B02A3 OR B05-B02A3)/MC
L135        2612 S L127,L134 AND A119/M0,M1,M2,M3,M4,M5,M6
L136        2049 S L127,L134 AND (C05-A01A OR B05-A01A)/MC
L137          74 S L135,L136 AND L126
L138         236 S L136 AND (1772 OR 1731 OR 1769)/DRN
L139         178 S L136 AND (R01772 OR R01731 OR R01769)/DCN
                E POTASSIUM PHOSPHATE/DCN
                E E4+ALL
L140        1547 S E4 OR 1753/DRN
L141         124 S L140 AND L136
L142         266 S L138,L139,L141
L143           6 S L142 AND L126
                SEL DN AN 4 5 6
L144           3 S L143 NOT E1-E5
L145           9 S L133,L144
L146          64 S L137 NOT L143-L145
L147          56 S L146 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L148           2 S L147 AND ?PHOSPHON?/BIX
L149          39 S L147 AND ?PHOSPHAT?/BIX
L150          21 S L147 AND ?PHOSPHOR?/BIX
L151           2 S L148 AND L149,L150
L152          54 S L147 NOT L151
                SEL DN AN 44 46
L153           2 S L152 AND E6-E7
L154          10 S L133,L153 AND L124-L153

     FILE 'WPIX' ENTERED AT 10:25:33 ON 27 MAR 2003

     FILE 'HCAPLUS' ENTERED AT 10:25:49 ON 27 MAR 2003
L155         185 S L120 AND (1 OR 62 OR 63)/SC
L156          59 S L120 AND (1 OR 62 OR 63)/SX
L157         177 S L155,L156 AND (PY<=1999 OR PRY<=1999 OR AY<=1999)
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L158           3 S L157 AND E8-E16
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FILE 'HCAPLUS' ENTERED AT 10:36:00 ON 27 MAR 2003

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      $0.65  Estimated cost this search
      $0.65  Estimated total session cost   0.100 DialUnits


File 345:Inpadoc/Fam.& Legal Stat  1968-2002/UD=200252
       (c) 2003 EPO

       Set  Items  Description
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       S1       1  PN=US 5997910

 1/39/1
DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat
(c) 2003 EPO. All rts. reserv.

16830949
Basic Patent (No,Kind,Date): US 5736164 A  19980407   <No. of Patents: 013>
Patent Family:
    Patent No     Kind  Date      Applic No    Kind  Date
    AU 9861809      A1  19980922    AU 9861809      A   19980224
    AU 200114935    A5  20010430    AU 200114935    A   20000928
    AU 749891       B2  20020704    AU 9861809      A   19980224
    EP 1221850      A1  20020717    EP 2000977279   A   20000928
    TR 200201017    T2  20020923    TR 200201017    A   20000928
    US 5736164      A   19980407    US 705594       A   19960830  (BASIC)
    US 5800837      A   19980901    US 812865       A   19970306
    US 5925383      A   19990720    US 943002       A   19971002
    US 5997910      A   19991207    US 109139       A   19980702
    US 20020048609  AA  20020425    US 954926       A   20010918
    US 6338860      BA  20020115    US 419127       A   19991015
    WO 9838863      A1  19980911    WO 98US3459     A   19980224
    WO 200128335    A1  20010426    WO 2000US41021  A   20000928
Priority Data (No,Kind,Date):
    US 812865 A  19970306
    WO 98US3459 W  19980224
    US 419127 A  19991015
    WO 2000US41021 W  20000928
    US 705594 A  19960830
    US 705594 A2 19960830
    US 943002 A  19971002
    US 705594 A3 19960830
    US 109139 A  19980702
    US 812865 A3 19970306
    US 954926 A  20010918
    US 419127 A3 19991015
    US 109139 A2 19980702

PATENT  FAMILY:
AUSTRALIA (AU)
  Patent (No,Kind,Date):  AU 9861809 A1  19980922
    PLANT  FERTILIZER  COMPOSITIONS  CONTAINING  PHOSPHONATE  AND PHOSPHATE
      SALTS, AND DERIVATIVES THEREOF (English)
    Patent Assignee:  TAYLOR JOHN
    Author (Inventor):  TAYLOR JOHN
    Priority  (No,Kind,Date):   US  812865   A   19970306; WO 98US3459  W
      19980224
    Applic (No,Kind,Date):  AU 9861809  A   19980224
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Searched by M. Smith

IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-057/26; A01N-059/26 ; C05B-007/00; C05G-003/00
CA Abstract No: * 129(16)202483C
Language of Document: English

Patent (No,Kind,Date): AU 200114935 A5 20010430
COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: FOLIAR NUTRIENTS INC
Author (Inventor): TAYLOR JOHN B
Priority (No,Kind,Date): US 419127 A 19991015; WO 2000US41021 W 20000928
Applic (No,Kind,Date): AU 200114935 A 20000928
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-059/26
CA Abstract No: * 134(21)291526N
Derwent WPI Acc No: * C 01-290777
Language of Document: English

Patent (No,Kind,Date): AU 749891 B2 20020704
PLANT FERTILIZER COMPOSITIONS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: FOLIAR NUTRIENTS INC
Author (Inventor): TAYLOR JOHN
Priority (No,Kind,Date): US 812865 A 19970306; WO 98US3459 W 19980224
Applic (No,Kind,Date): AU 9861809 A 19980224
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-057/26; A01N-059/26 ; C05B-007/00; C05G-003/00
CA Abstract No: * 129(16)202483C; 136(06)081312E
Derwent WPI Acc No: * C 00-095913
Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Patent (No,Kind,Date): EP 1221850 A1 20020717
COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English; French; German)
Patent Assignee: FOLIAR NUTRIENTS INC (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): WO 2000US41021 W 20000928; US 419127 A 19991015
Applic (No,Kind,Date): EP 2000977279 A 20000928
Designated States: (National) AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-059/26
CA Abstract No: * 134(21)291526N; 136(06)081312E
Derwent WPI Acc No: * C 01-290777
Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Legal Status (No,Type,Date,Code,Text):

EP 1221850	P	19991015	EP AA	PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG)) US 419127 A 19991015
EP 1221850	P	20000928	EP AA	PCT-APPLICATION (PCT-ANMELDUNG) WO 2000US41021 W 20000928
EP 1221850	P	20000928	EP AE	EP-APPLICATION (EUROPAEISCHE ANMELDUNG) EP 2000977279 A 20000928
EP 1221850	P	20020717	EP AK	DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT: (IN EINER ANMELDUNG BENANNTE VERTRAGSSTAATEN)

Searched by M. Smith

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

EP 1221850 P 20020717 EP AX EXTENSION OF THE EUROPEAN PATENT TO (ERSTRECKUNG DES EUROPAEISCHEN PATENTS AUF) AL;LT;LV;MK;RO;SI

EP 1221850 P 20020717 EP A1 PUBLICATION OF APPLICATION WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT)

EP 1221850 P 20020717 EP 17P REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT) 20020502

TURKEY (TR)
Patent (No,Kind,Date): TR 200201017 T2 20020923
FOSFONAT VE FOSFAT TUZLARI, VE BUNLARIN TUEREVLERINI IHTIVA EDEN BITKILERE YOENELIK KOMPOZISYONLAR (Turkish)
Patent Assignee: FOLIAR NUTRIENTS INC (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 419127 A 19991015
Applic (No,Kind,Date): TR 200201017 A 20000928
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-059/26
CA Abstract No: * 134(21)291526N; 136(06)081312E
Derwent WPI Acc No: * C 01-290777
Language of Document: Turkish

UNITED STATES OF AMERICA (US)
Patent (No,Kind,Date): US 5736164 A 19980407
FUNGICIDAL COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: TAYLOR JOHN B (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 705594 A 19960830
Applic (No,Kind,Date): US 705594 A 19960830
National Class: * 424601000; 424605000
IPC: * A01N-059/26
CA Abstract No: * 128(21)254062P; 129(16)202483C; 128(21)254062P
Derwent WPI Acc No: * C 98-239160; C 00-095913; C 98-239160
Language of Document: English

Patent (No,Kind,Date): US 5800837 A 19980901
PLANT FERTILIZER COMPOSITIONS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS AND DERIVATIVES THEREOF (English)
Patent Assignee: FOLIAR NUTRIENTS INC (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 812865 A 19970306; US 705594 A2 19960830
Applic (No,Kind,Date): US 812865 A 19970306
Addnl Info: 5736164 Patented
National Class: * 424601000; 071036000; 424605000; 504101000
IPC: * A01N-059/26; C05B-007/00; C05G-003/00; C05G-003/02
CA Abstract No: * 128(21)254062P; 129(16)202483C; 129(16)202483C
Derwent WPI Acc No: * C 98-239160; C 00-095913
Language of Document: English

Patent (No,Kind,Date): US 5925383 A 19990720
FUNGICIDAL COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: TAYLOR JOHN B (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 943002 A 19971002; US 705594 A3 19960830
Applic (No,Kind,Date): US 943002 A 19971002
Addnl Info: 5736164 Patented

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National Class: * 424601000; 424605000; 514129000; 514131000; 514141000; 514142000; 514143000
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-059/26
CA Abstract No: * 128(21)254062P; 129(16)202483C
Derwent WPI Acc No: * C 98-239160; C 00-095913
Language of Document: English

Patent (No,Kind,Date): US 5997910 A 19991207
PLANT FERTILIZER COMPOSITIONS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS AND DERIVATIVES THEREOF (English)
Patent Assignee: TAYLOR JOHN B (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 109139 A 19980702; US 812865 A3 19970306; US 705594 A2 19960830
Applic (No,Kind,Date): US 109139 A 19980702
Addnl Info: 5800837 19980901 Patented; 5736164 19980407 Patented
National Class: * 424601000; 071036000; 424605000; 504101000; 514129000; 514131000; 514141000; 514142000; 514143000
IPC: * A01N-059/26; C05B-007/00; C05G-003/00; C05G-003/02
CA Abstract No: * 128(21)254062P; 129(16)202483C
Derwent WPI Acc No: * C 98-239160; C 00-095913; C 00-095913
Language of Document: English

Patent (No,Kind,Date): US 20020048609 AA 20020425
COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: TAYLOR JOHN B (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 954926 A 20010918; US 419127 A3 19991015; US 109139 A2 19980702; US 812865 A3 19970306; US 705594 A2 19960830
Applic (No,Kind,Date): US 954926 A 20010918
Addnl Info: 5997910 Patented; 5800837 Patented; 5736164 Patented
National Class: * 424601000; 424605000; 514129000; 514131000; 514141000; 514142000; 514143000
IPC: * A01N-057/00; A01N-057/18; A01N-057/10; A01N-059/26
CA Abstract No: * 128(21)254062P; 129(16)202483C; 134(21)291526N; 136(06)081312E
Derwent WPI Acc No: * C 98-239160; C 00-095913; C 01-290777
Language of Document: English

Patent (No,Kind,Date): US 6338860 BA 20020115
COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: FOLIAR NUTRIENTS INC (US)
Author (Inventor): TAYLOR JOHN B (US)
Priority (No,Kind,Date): US 419127 A 19991015; US 109139 A2 19980702; US 812865 A3 19970306; US 705594 A2 19960830
Applic (No,Kind,Date): US 419127 A 19991015
Addnl Info: 5997910 Patented; 5800837 Patented; 5736164 Patented
National Class: * 424601000; 424605000; 514129000; 514131000; 514141000; 514142000; 514143000
IPC: * A01N-059/26; A01N-057/00; A01N-057/18; A01N-057/10
CA Abstract No: ; 136(06)081312E
Language of Document: English

UNITED STATES OF AMERICA (US)
Legal Status (No,Type,Date,Code,Text):

US 5736164	P	19960830	US AE	APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 705594 A 19960830
US 5736164	P	19980407	US A	PATENT
US 5736164	P	20010102	US RR	REQUEST FOR REEXAMINATION FILED 20001206
US 5800837	P	19960830	US AA	PRIORITY

		US 705594 A2 19960830
US 5800837	P	19970306 US AE APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 812865 A 19970306
US 5800837	P	19970714 US AS02 ASSIGNMENT OF ASSIGNOR'S INTEREST FOLIAR NUTRIENTS, INC. 321 AVENUE N.E. P.O. BOX 479 CAIRO, GEORGIA 31720 ; TAYLOR, JOHN B. : 19970324
US 5800837	P	19980901 US A PATENT
US 5800837	P	20010102 US RR REQUEST FOR REEXAMINATION FILED 20001206
US 5800837	P	20010918 US CC CERTIFICATE OF CORRECTION
US 5925383	P	19960830 US AA PRIORITY US 705594 A3 19960830
US 5925383	P	19971002 US AE APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 943002 A 19971002
US 5925383	P	19990720 US A PATENT
US 5925383	P	20010206 US CC CERTIFICATE OF CORRECTION
US 5997910	P	19960830 US AA PRIORITY (CONTINUATION IN PART) US 705594 A2 19960830
US 5997910	P	19970306 US AA PRIORITY (DIVISION) US 812865 A3 19970306
US 5997910	P	19980702 US AE APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 109139 A 19980702
US 5997910	P	19991207 US A PATENT
US 5997910	P	20020702 US RF REISSUE APPLICATION FILED (REISSUE APPL. FILED) 20011019
US 6338860	P	19960830 US AA PRIORITY (CONTINUATION IN PART) US 705594 A2 19960830
US 6338860	P	19970306 US AA PRIORITY (DIVISION) US 812865 A3 19970306
US 6338860	P	19980702 US AA PRIORITY (CONTINUATION IN PART) US 109139 A2 19980702
US 6338860	P	19991015 US AE APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 419127 A 19991015
US 6338860	P	20020115 US BA PATENT (NO PREVIOUS PRE-GRANT PUBLICATION)
US 20020048609	P	19960830 US AA PRIORITY (CONTINUATION IN PART) US 705594 A2 19960830
US 20020048609	P	19970306 US AA PRIORITY (DIVISION) US 812865 A3 19970306
US 20020048609	P	19980702 US AA PRIORITY (CONTINUATION IN PART) US 109139 A2 19980702
US 20020048609	P	19991015 US AA PRIORITY (DIVISION) US 419127 A3 19991015
US 20020048609	P	20010918 US AE APPLICATION DATA (PATENT) (APPL. DATA (PATENT)) US 954926 A 20010918
US 20020048609	P	20020425 US A1A1 PATENT APPLICATION PUBLICATION (PRE-GRANT)

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
Patent (No,Kind,Date): WO 9838863 A1 19980911
PLANT FERTILIZER COMPOSITIONS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: TAYLOR JOHN (US)
Author (Inventor): TAYLOR JOHN (US)
Priority (No,Kind,Date): US 812865 A 19970306
Applic (No,Kind,Date): WO 98US3459 A 19980224
Designated States: (National) AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; GM; GW; HU; ID; IL; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ; VN; YU; ZW (Regional) GH; GM; KE; LS; MW; SD; SZ; UG; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG
Filing Details: WO 130000 With international search report; Before expiration of time limit for amending the claims and to be republished in the event of the receipt of the amendments
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-057/26; A01N-059/26 ; C05B-007/00; C05G-003/00
CA Abstract No: * 129(16)202483C
Derwent WPI Acc No: * C 00-095913
Language of Document: English

Patent (No,Kind,Date): WO 200128335 A1 20010426
COMPOSITIONS FOR PLANTS CONTAINING PHOSPHONATE AND PHOSPHATE SALTS, AND DERIVATIVES THEREOF (English)
Patent Assignee: FOLIAR NUTRIENTS INC (US)
Author (Inventor): TAYLOR JOHN B
Priority (No,Kind,Date): US 419127 A 19991015
Applic (No,Kind,Date): WO 2000US41021 A 20000928
Designated States: (National) AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW (Regional) GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZW; AM; AZ; BY ; KG; KZ; MD; RU; TJ; TM; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR ; NE; SN; TD; TG
Filing Details: WO 130000 With international search report; Before expiration of time limit for amending the claims and to be republished in the event of the receipt of the amendments
IPC: * A01N-057/00; A01N-057/10; A01N-057/18; A01N-059/26
CA Abstract No: * 134(21)291526N; 134(21)291526N
Derwent WPI Acc No: * C 01-290777; C 01-290777
Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
Legal Status (No,Type,Date,Code,Text):

WO 9838863	P	19970306	WO AA PRIORITY (PATENT) US 812865 A 19970306
WO 9838863	P	19980224	WO AE APPLICATION DATA (APPL. DATA) WO 98US3459 A 19980224
WO 9838863	P	19980911	WO AK DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED STATES CITED IN A PUBLISHED APPL. WITH SEARCH REPORT) AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK

MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

WO 9838863 P 19980911 WO AL DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

WO 9838863 P 19980911 WO A1 PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT (PUB. OF THE INTERNATIONAL APPL. WITH THE INTERNATIONAL SEARCH REPORT)

WO 9838863 P 19981203 WO DFPE REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE

WO 9838863 P 19990203 WO 121 EP: PCT APP. ART. 158 (1) (EP: PCT ANM. ART. 158 (1))

WO 9838863 P 20000105 DE 8642/REG IMPACT ABOLISHED FOR DE (WIRKUNG WEGGEFALLEN FUER DE)

WO 9838863 P 20000229 WO NENP NON-ENTRY INTO THE NATIONAL PHASE IN:
CA

WO 9838863 P 20000303 WO NENP NON-ENTRY INTO THE NATIONAL PHASE IN:
JP 1998538569

WO 9838863 P 20001004 WO 122 EP: PCT APP. NOT ENT. EUROP. PHASE (EP: PCT ANM. NICHT IN EUROP. PHASE EING.)

WO 200128335 P 19991015 WO AA PRIORITY (PATENT)
US 419127 A 19991015

WO 200128335 P 20000928 WO AE APPLICATION DATA (APPL. DATA)
WO 2000US41021 A 20000928

WO 200128335 P 20010426 WO AK DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED STATES CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

WO 200128335 P 20010426 WO AL DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT (DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPL. WITH SEARCH REPORT)
GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

WO 200128335 P 20010426 WO A1 PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT (PUB. OF THE INTERNATIONAL APPL. WITH THE INTERNATIONAL SEARCH REPORT)

WO 200128335 P 20010620 WO 121 EP: THE EPO HAS BEEN

INFORMED BY WIPO THAT EP WAS DESIGNATED IN THIS APPLICATION

WO 200128335 P 20010816 WO DFPE REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE

WO 200128335 P 20020412 WO ENP ENTRY INTO THE NATIONAL PHASE IN:
JP 53939 A

WO 200128335 P 20020926 DE 8642/REG IMPACT ABOLISHED FOR DE (WIRKUNG WEGGEFALLEN FUER DE)

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Searched by M. Smith